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PERSONAL.

Lieut.-Commander Franklin C. Prindle, Civil Engineer, U. S. Navy, M. Am. Soc. C. E., has been promoted to the relative rank of Commander.

Prof. Henry M. Paul, Professor of Mathematics at the Naval Observatory, Washington, D. C., has been ordered to the Navy Yard, Mare Island, Cal.

Mr. D. C. Holly, Chief Engineer of the water-works, at Paducah, Ky., has resigned. Mr. Asa Williams, of Owensboro, has been appointed to succeed him.

Mr. E. C. Oliver, civil engineer, of Alpena, Mich., has accepted the position of Assistant Professor of Civil Engineering in the University of Illinois, Champaign, Ill.

Lieut. Frank O. Maxson, Civil Engineers, U. S. Navy, with headquarters at Puget Sound Naval Station, has been promoted to the relative rank of Lieutenant-Commander.

Lieut. Adolfo J. Menocal, Civil Engineer, U. S. Navy, on duty at the naval station at Key West, Fla., has been promoted from the junior grade to the full grade of Lieutenant.

Mr. A. C. Menocal, M. Am. Soc. C. E., Civil Engineer, U. S. Navy, was retired from active service Sept. 1, on account of age, and has been assigned to special duty with the Nicaragua Canal Commission.

Prof. Benjamin D. Woodward, Professor of the Romance Languages and Literature, of Columbia University, New York, has been appointed Assistant Commissioner-General to the Paris Exposition of 1900.

Mr. C. E. Van Bergen, Manager of the Duluth Gas & Water Co., Duluth, Minn., has been appointed Secretary and Manager of the Board of Water and Light Commissioners, in charge of the city plant.

Lieut. Charles Keller, Corps of Engineers, U. S. Army, has been relieved from duty at Beaufort, S. C., and has been ordered to Rock Island, Ill., for duty under Capt. Curtis McD. Townsend, M. Am. Soc. C. E., Corps of Engineers.

Capt. William L. Sibert, M. Am. Soc. C. E., Corps of Engineers, U. S. Army, has been relieved from duty at Little Rock, Ark., and has been ordered to Willet's Point, N. Y., for duty under Major John G. D. Knight, Corps of Engineers.

Major William Starling M. Am. Soc. C. E., formerly Chief Engineer of the Mississippi Levee District, at Greenville, Miss., has lately been apppointed Chief Engineer of the Lower Yazoo Mississippi District, to succeed Capt. William J. Hardee, M. Am. Soc. C E.

Col. Jared A. Smith, M. Am. Soc. C. E., Corps of Engineers, U. S. Army, of Cleveland, O., has been detailed to succeed Major Thomas W. Simons, Corps of Engineers, as a member of the board to examine the locality of a proposed bridge across the Niagara River.

Mr. Charles H. Nichols, Jun. Am. Soc. C. E., of the firm of Nichols & Potter, consulting engineers, 42 Church St., New Haven, Conn., has opened an office in the Hosley Block, Branford, Conn., in which place he has charge of the construction of the new water-works for the Branford Electric Co.

Mr. Ira G. Rawn, General Superintendent of the Baltimore & Ohio Southwestern Ry., with headquarters at Cincinnati, O., has been promoted to succeed Mr. W. W. Peabody as General Manager. The latter will retain his position of Vice-President, which office has been separated from that of General Manager and the office of General Superintendent has been abolished.

Prof. Arthur Beardsley, M. Am. Soc. C. E., who has had charge of the Department of Engineering and the Mechanic Arts, in Swarthmore College, Swarthmore, Pa., for the past 26 years, has resigned his professorship on account of impaired sight. In appreciation of his services he has been made Professor Emeritus. His successor is Mr. W. H. Stine, late Professor of Electrical Engineering in the Armour Institute, Chicago.

OBITUARY.

Mr. Oscar Wright, Superintendent of the Rockville Electric Light Co., Rockville, Ind., died Aug. 29.

Mr. Henry G. Humber, Inspector of the Sewers, of Denver, Colo., since 1887, died in that city Aug. 26, aged 53.

Mr. John B. Dyar, formerly President of the Michigan Radiator & Mfg. Co., of Detroit, Mich., died at Grosse Point, Mich., last week.

Major William Vance McCracken, railway contractor, of New York city, died Aug. 30, aged 62. He was born in Bucyrus, O., and served in the Union Army during the Civil War.

Mr. William Frederick Bender, mechanical engineer, proprietor of the firm of William Oliver & Son, stone contractors, of Baltimore, Md., died Aug. 27, aged 72. He was a native of Germany.

Mr. Henry M. Myers, President of the H. M. Myers Co., Beaver Falls, Pa., shovel manufacturer, died of heart failure Aug. 30, aged 67. He was born in Georgetown, O., and learned the blacksmithing trade in Cohoes Falls, N. Y. He became the manager of the axe and shovel works of Newmyer & Graff, Allegheny City, Pa., and in 1869 organized the shovel works of Myers & Arnold, Beaver Falls. He is said to have taken out over 50 patents in this country, Canada and Europe.

Mr. Wilson Eddy, for 30 years Master Mechanic of the Boston & Albany R. R., died at his home in Springfield, Mass., Sept. 2. He was born in Chelsea, Vt., Feb. 24, 1813, and at 19 went to Lowell where he was employed on the canal. In 1840 he entered the service of the Boston & Albany R. R. as a mechanic, and was soon promoted to be Foreman of the local shops at Springfield. He was appointed Master Mechanic of the road in 1850, and during the years he held that position he built 135 locomotives, among them the "Addison Gilmore," which, it is said, was the fastest locomotive in the world at that time, and which won a gold medal and diploma at a tournament in Worcester, Mass., Oct. 1 and 2, 1851, making nine miles in 11 min. 20 sec. He resigned his position in 1881, and was succeeded by his son, Mr. Horace Eddy.

Mr. James Samuel Thomas Stranahan, President of the Park Commission of Brooklyn, N. Y., from 1860 to 1882, and formerly President of the Board of Trustees of the Brooklyn Bridge, died of apoplexy, at Saratoga, N. Y., Sept. 3. He was born at Peterboro, N. Y., April 25, 1808, and studied civil engineering, abandoning it however to engage in Indian trading. He founded the town of Florence, N. Y., in 1832, and represented that section in the Assembly in 1838. In 1840 he went to Newark, N. J., and became interested in the construction of railways. He removed to Brooklyn in 1845 and was elected an alderman of that city in 1848. In 1854 he was elected to Congress and remained in Washington until 1857, when he was appointed a member of the Metropolitan Police Commission of Brooklyn. During the Civil War he was President of the War Fund Committee and established "The Brooklyn Union," now "The Standard-Union." He was appointed President of the Park Commission in 1860 and held that office until 1882. In recognition of his services on this commission his statue was erected at the entrance to Prospect Park in 1891. Mr. Stranahan was also President of the Union Ferry Co. of Brooklyn in 1888, and was a director for 35 years. He was the oldest member of the Chamber of Commerce of New York city and was long a trustee and director of the New York and Brooklyn Bridge.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

CENTRAL RAILWAY CLUB.
Sept. 9. Secy., H. D. Vought, 114 5th Ave., New York city.

MONTANA SOCIETY OF ENGINEERS.
Sept. 10. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

THE LOUISIANA ENGINEERING SOCIETY.
Sept. 12. "Evolution of Structural Design," F. T. Llewllyn. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

ASSOCIATION OF EDISON ILLUMINATING COMPANIES.
Sept. 12-13. Annual meeting, Sault Ste. Marie, Mich. Secy., Wilson S. Howell, Newark, N. J.

NORTHWEST RAILWAY CLUB.
Sept. 13. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Sept. 13. Secy., Wm. H. Searles, Case Library Bldg., Cleveland, O.

DENVER SOCIETY OF CIVIL ENGINEERS.
Sept. 13. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

THE RAILWAY SIGNALING CLUB.
Sept. 13. Secy., Earl M. Seitz, C. & N. W. Ry., Chicago, Ill.

ROADMASTERS' ASSOCIATION OF AMERICA.
Sept. 13. Annual meeting, Denver, Colo. Secy., J. B. Dickson, Sterling, Ill.

NEW YORK STATE STREET RAILWAY ASSOCIATION.
Sept. 13-14. Annual meeting, Manhattan Beach, Brooklyn, N. Y. Secy., H. A. Robinson, New York city.

MASTER CAR AND LOCOMOTIVE PAINTERS' ASSOCIATION.
Sept. 13-15. Annual meeting, St. Paul, Minn. Secy., Robert McKeon, Kent, O.

NEW ENGLAND WATER-WORKS ASSOCIATION.
Sept. 14-16. Annual meeting, Portsmouth, N. H. Secy., J. C. Whitney, Newton, Mass.

ENGINEERS' CLUB OF CINCINNATI.
Sept. 15. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

BROOKLYN ENGINEERS' CLUB.
Sept. 15. Secy., A. J. Prevost, Jr., 191 Montague St., Brooklyn, N. Y.

NORTHWESTERN TRACK AND BRIDGE ASSOCIATION.
Sept. 16. D. W. Meeker, St. Paul, Minn.

ENGINEERS' CLUB OF PHILADELPHIA.
Sept. 17. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' CLUB OF COLUMBUS.
Sept. 17. Secy., H. M. Gates, 12½ North High St., Columbus, O.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Sept. 19. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

ENGINEERS' CLUB OF MINNEAPOLIS.
Sept. 19. Secy., H. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Sept. 20. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

BOSTON SOCIETY OF CIVIL ENGINEERS.
Sept. 21. Secy., S. E. Tinkham, City Hall, Boston, Mass.

WESTERN FOUNDRYMEN'S ASSOCIATION.
Sept. 21. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Sept. 28. Secy., R. W. Pope, 26 Cortlandt St., New York city.

ENGINEERS' CLUB OF ST. LOUIS.
Sept. 21. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.

CENTRAL STATES WATER-WORKS ASSOCIATION.
Sept. 27-29. Annual meeting, Springfield, O. Secy., John Fisher, 11 Riley St., Hamilton, O.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
Sept. 28. Secy., R. W. Pope, 26 Cortland St., New York city.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Oct. 3. Secy., C. L. Annan, City Engineers' Office, St. Paul, Minn.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Oct. 3. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

CHICAGO ELECTRICAL ASSOCIATION.
Oct. 7. Secy., J. R. Cravath, 825 Monadnock Block, Chicago, Ill.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENT.
Oct. 12-16. Annual meeting, Washington, D. C. Secy., D. L. Fulton, Bureau of Highways and Sewers, Allegheny, Pa.

AMERICAN INSTITUTE OF MINING ENGINEERS.
Oct. 18. Annual meeting, Buffalo, N. Y. Secy., R. W. Raymond, P. O. Box 223, New York city.

AMERICAN ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 18-20. Annual meeting, Richmond, Va. Secy., S. F. Patterson, Boston & Maine R. R., Concord, N. H.

PENNSYLVANIA STREET RAILWAY ASSOCIATION.
Oct. 19-20. Annual meeting, Scranton, Pa. Secy., S. P. Light, Lebanon, Pa.

NEW ENGLAND RAILROAD CLUB.—This club will take its annual outing on Sept. 13. The program includes music and dinner at Crescent Park, Narragansett Bay, and arrangements have been made for a special train which will leave Boston at 9.05 a. m.

MASTER CAR & LOCOMOTIVE PAINTERS' ASSOCIATION.—The 29th annual meeting of this association will be held at St. Paul, Minn., Sept. 13-16. The following subjects will be reported upon by the various committees: "Quick Drying Colors for Passenger Cars and Locomotives;" "The Railway Paint Shop Stock Room;" "Classification of Painting Repairs on the Outside and Inside Body of Passenger Cars;" "Painters and Painting as Compared with and Related to Other Mechanical Departments of Railway Work;" "The Difficulties and Environments of the Master Car Painter;" "A Historical Sketch of Railway Equipment Painters and Their Work in the Early Days;" "Do Railway Companies Give Proper Consideration to the Painting of Freight Cars?" "The Advantages Derived from Having a Suitable Shop for Painting of Locomotives Instead of Doing the Work in Round Houses and Machine Shops;" "Are the Railway Companies Justified in Surfacing and Varnishing Passenger Equipment, Cars and Locomotives?" "What Progress, If Any, Has Been Made in the Past Year in Paint Spraying?"

There will also be discussions on the following questions: "Do you paint roofing tin on both sides?" "What is the best filler for hardwood?" "What is the best varnish remover?" "Is there any advantage in the use of the gilding wheel?" "Which is the best for general purposes, grain alcohol, wood alcohol or alkaline?"

NEW ENGLAND WATER-WORKS ASSOCIATION.—The 17th annual convention will be held at Portsmouth, N. H., Sept. 14 to 16. Headquarters will be at the Hotel Wentworth and an exhibit of water-works appliances will be made. Exhibitors should address Mr. Henry F. Jenks, Pawtucket, R. I., for information concerning this. The following is the list of papers:

"Method for Determination of Color and the Relations of the Color to the Character of the Water." Frederick S. Hollis, Biologist, Metropolitan Water Board, Boston, Mass.

"Some Things that Should be Done in Constructing a Distributing System of Water-Works." William R. Hill, C. E., Chief Engineer and Superintendent, Syracuse, N. Y.

An informal talk on "Recent Sanitary Development in Certain Water Supplies." William T. Sedgwick, professor of Biology, Mass. Institute of Technology.

"Stand Pipes for Street Watering." F. F. Forbes, Supt., Brookline, Mass.

"Triple Expansion Pumping Engines." J. M. Betton, M. E., Brooklyn, N. Y.

"The Occurrence of Cristatella in the Storage Reservoir at Henderson, N. C." Robert S. Weston, C. E., Brockton, Mass.

"Description of the Monson, Mass., Water-Works." Frank L. Fuller, C.E., Boston, Mass.

"Man's Imitation of Nature in Purification of Water." Dr. Gardner T. Swarts, Secretary Rhode Island State Board of Health, Providence, R. I.

"Result of Tube Well Experiments in Lowell, Mass." George Bowers, C. E., City Engineer, Lowell, Mass.

"Surface Water Supplies." John C. Haskell, C. E., Supt., Lynn, Mass.

"Description of the Separate High Pressure Fire Service System of Providence, R. I." Edmund B. Weston, C. E., Consulting Engineer, Providence, R. I.

J. C. Whitney, Secy., Newton, Mass.

NATIONAL IRRIGATION CONGRESS.—The resolutions adopted at the annual convention held at Cheyenne, Wyo., Sept. 1, 2 and 3 favor an appropriation of not less than $100,000 for hydrographic surveys, for the measurement of streams and the survey of reservoir sites; strongly commend the care of forests begun by the Secretary of the Interior, and urge the formation of a Forestry Bureau and an appropriation by Congress sufficient for its support and management; urge upon the states legislation to prevent forest fires; favor the suggestion of Professor

Sargent, of Harvard University, that instruction in forestry be given at West Point, to prepare army officers for an intelligent understanding of forestry administration; commend the action of Cornell University in starting a school of forestry; favor the creation in the Department of Agriculture of a bureau of irrigation and a liberal appropriation for its support; express cordial appreciation of the value of irrigation investigations already made by agricultural experiment stations, and recommend that they give increased attention to the arid states; request Congress to make sufficient appropriations to construct the reservoir surveyed at Butte, Ariz., and to construct a water-shed reserve near Butte, Mont.; provide that a committee of five be appointed to present a bill to this Congress regulating and establishing uniform methods for appropriation and control of the waters of interstate streams; reaffirm the resolutions of the Phoenix congress on reservoirs, of the Lincoln congress on the public ownership of water, and of the Phoenix congress on the cession of public lands to the states under strict conditions insuring settlement, and indorse the Chittenden report favoring the construction of reservoirs and the recommendation of Elwood Mead favoring the leasing of the grazing lands.

WESTERN SOCIETY OF ENGINEERS.—The first fall meeting of this Society was held Sept. 7, at Chicago, Ill., and the following papers were presented: The "Equilibristat" (for railroad track inspection), D. J. Whittemore; "Mechanics of Suction and Suction Pipes," D. W. Mead; "Cableway Construction," Robt. D. Seymour; "Concrete Facing on a Sandstone Bluff at St. Paul," Onward Bates. The advance program for the year ending February, 1899, is given as follows:- Sept. 21, "The Soudan and Recent British Campaigns There," H. G. Prout; Sept. 28, "The Foundations for the U. S. Government Post Office and Custom House Building at Chicago," William Sooy Smith; Oct. 5, "Track Elevation of the Chicago & Northwestern Ry.," Louis H. Evans. In discussion of this paper notes will be presented on the track elevation of Ill. Central Ry., H. W. Parkhurst; C., M. & St. P. Ry., Messrs. Wade, Rogers and Reichmann; C., B. & Q. R. R., G. H. Bremner; L. S. & M. S. Ry. and C. R. I. & P. Ry., L. H. Clarke; P., F. W. & C. Ry., W. H. Coverdale; P., C. C. & St. L. Ry., Thos. H. Johnson; 16th St. Crossing, G. W. Vaughn; (Title to be announced later), Robert B. Owens; Oct. 19, "Masonry" (illustrated), George S. Morison; Nov. 2, "Construction of Retaining Walls for the Sanitary District of Chicago," James W. Beardsley; "Berthier Method of Coal Calorimetry," Charles V. Kerr; "Brakes for Electrical Cars," William G. Price; Nov. 16, "The Manchester Ship Canal" (illustrated), Elmer L. Corthell; "Tables of Excessive Precipitations of Rain at Chicago," Edwin Duryea, Jr.; Dec. 7, "Electrolytic Corrosion of Underground Metallic Structures," Prof. D. C. Jackson; "Mechanical Plants of Large Buildings" (Part II.), Dankmar Adler; Dec. 21, "Foundations for Railroad Bridge Across the St. Lawrence River at Cornwall, Ont.," George E. Thomas; "Drawbridges on Chicago & Northwestern Ry.," William H. Finley; "Notes on Engineering Work," John S. Prell; Jan. 3, Annual Meeting; Jan. 18, "Establishment of Street Grades," Charles P. Chase; Feb. 8, "Measurement of the Discharge of the Niagara River," Clinton B. Stewart; "The Effect of Speed and Radii of Curves on the Inclination of Bicycle Tracks," John C. Quade.

NEW PUBLICATIONS.

LITERARY MAGAZINES.—In "Harper's" for September, Mr. W. C. Ford discusses the new revenue policy of the United States and points out the reasons why the stamp and other taxes which have recently been adopted are likely to be a permanent feature of our fiscal system. He emphasizes especially the fact that a protective tariff (as distinguished from a tariff for revenue) can no longer be expected to yield large returns to the treasury. "Days in the Arctic" is the title of an entertaining and well illustrated paper by Mr. F. G. Jackson, describing his experiences in Franz Josef Land. Hon. James Bryce discusses the policy which the United States had best pursue toward the former Spanish possessions, and considers the question from a broad standpoint. If we regard purely our material interests, he thinks that we will take none of these over-sea possessions as colonies; but he recognizes the feelings of national pride that will prompt an opposite course.

The September "Century" has two articles on the same topic, one by Carl Schurz, in which the dangers that beset us in acquiring these new territories are set forth, and the other by Hon. Whitelaw Reid, entitled "The Territory with Which We Are Threatened." Mr. Reid recognizes the arguments of those who foresee trouble from a policy of "colonial expansion;" but he shows that it is rather a matter of what we are obliged to do to fulfil our international obligations than what we want to do as a matter of self-interest. Emile Ollivier, the eminent French statesman, writes on "America, Spain and France," and emphatically declares that America has fought a just war and that to be relieved of her colonies will really be a blessing to Spain. "The Malay Pirates of the Philippines" are described by Prof. Worcester of the University of Michigan, and we commend the article to any of our readers who think that the task of governing the Philippines is likely to prove an easy one.

In "Scribner's" for September, Edgar R. Dawson, M. E., writes of the Jungfrau Railway, work on which is now in progress and which will be one of the highest railways in the world, reaching an altitude of 13,720 ft., if one counts as a part of the railway the 240 ft. elevated, which makes the last stage of the trip. The September "Cosmopolitan" has a paper on "Horseless Carriages in Paris," written from the popular point of view. Two other articles deserving mention here are "A Study of the Modern Battleship," and a description of the methods by which the great newspapers have given their readers the news of the war, at an expense for which their added returns do not begin to compensate. In the "Atlantic" for September, Mr. Worthington C. Ford writes on "New Opportunities for American Commerce." He thinks that there is little prospect of our building up any large market for American goods in China or the Philippines; but believes that Cuba and Porto Rico will prove very valuable possessions. "Fifty Years of American Science" is the title of a paper which was inserted at this time, we presume, because of the current semi-centennial meeting of the American Association for the Advancement of Science in Boston.

"Appleton's Popular Science Monthly" for September opens with a paper entitled "Geological Waterways Across Central America," in which various depressions are described which were once the beds of straits connecting the Atlantic and Pacific oceans. Some of these, we believe, are known to few engineers, and the article should have interest for all students of the Isthmian canal problem. The same magazine contains the fullest account we have seen in any American periodical of the purchase of the Swiss railways by the Government, which was ordered by an overwhelming popular vote on Feb. 20 last. The experiment Switzerland is making is one of great interest and its results will be attentively watched. It may be said that all the railways will not probably come into possession of the state for a half-dozen years yet, one after the other being taken, according to the dates fixed in their original charters.

The "North American Review" is devoted chiefly to current political problems, those in connection with the East and West Indies receiving, of course, greatest prominence. We may note that Hon. John B. Barrett, late U. S. Minister to Siam, urges that the Philippines will be a highly valuable acquisition for this country, and his article was written, curiously enough, before the declaration of war last spring.

The "Review of Reviews" has its usual critical discussion of current events, and we note especially an article on the cost and finances of the war, in which it is computed from official figures that the total cost of our war with Spain, including the garrisoning of our new possessions till Jan. 1 next, will reach $250,000,000. The pension bill is not included in this; and from the condition of many of the returning troops, it looks as if the typhoid-inoculated water, which the soldiers had to drink would in the end prove more costly than smokeless powder.

In the August "Fortnightly Review" we notice two articles worth mention here. One is "The Dynastic Crisis in Spain," by a Spaniard, explaining some of the reasons why the present occupant of the Spanish throne has felt great insecurity during the past few months, and the other is an article on the prevention of consumption.

LOSSES FROM CANALS FROM FILTRATION AND SEEPAGE.—Bulletin No. 48, Colorado Agricultural Experiment Station, Fort Collins, Colo. By L. G. Carpenter, Meteorologist and Irrigation Engineer. Paper; 6 × 9 ins.; pp. 36; tables and one illustration. Address, Director Experimental Station.

The conclusions drawn by the professor on this subject are given elsewhere in this issue. They are founded principally on actual measurements, made mostly in Colorado.

VEREIN DEUTSCHER INGENIEURE.—Membership list for 1898. Published by Geschäftsführung und Redaktion der Vereinsschriften, Berlin, N. W. Charlotten Str., 43. Pamph.; 5¼ × 7½ ins.; pp. 285.

This is a list of members of the Society of German Engineers, giving their addresses. The names are arranged according to districts, but a complete alphabetical list of names is given with cross references to the district lists. The total membership of the Society is nearly 3,000.

REPORT ON THE WATER-WORKS SYSTEM OF MEMPHIS, TENN.—By John Lundie, Consulting Engineer, Chicago. Paper; 5¾ × 8½ ins.; pp. 46; illustrated.

In February, 1898, Mr. Lundie was directed to examine and report upon the water-works system, and to present an estimate of the cost of a similar plant. The report outlines the history of the water supply, and describes the present works, in which a 5-ft. tunnel ¾ mile long and 80 ft. below the surface, forms an underground reservoir fed by 60 artesian wells. The water is pumped by three Worthington vertical engines of 10,000,000 gallons capacity, taking water from a 10-ft. pump well to the tunnel. The supply is reported to be inexhaustible, and the cost of duplication of the plant, including land, is estimated at $1,283,938. To the report is appended the text of the present contract between the city and the Artesian Water Co.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

GAS AND GASOLINE ENGINES AND HOISTS.—The Weber Gas & Gasoline Engine Co., Kansas City., Mo. Pamph.; 9¼ × 6 ins.; pp. 64.

This is an illustrated description of the Weber gas engines and several special applications, such as agricultural engines for farmers, irrigators and dairymen. Illustrations and brief descriptions of hoisting engines are also given and a number of letters from users of Weber machinery are included.

ODORLESS SEWAGE DISPOSAL FOR TOWN AND COUNTRY HOUSES.—Edson Manufacturing Co., 132 Commercial St., Boston, Mass. Paper; 6½ × 3 ins.; pp. 20; illustrated.

This pamphlet describes a pump and fittings for lifting the contents of cesspools to tank wagons.

SPECIAL RIVETED PIPE.—Abendroth & Root Mfg. Co., 28 Cliff St., New York city. Paper; 8 × 7 ins.; pp. 32.

This catalogue describes the well-known spiral riveted pipe which is a specialty of this firm, and illustrates its use in many different fields. Special forms of joints, elbows, tees, etc., are also shown.

SNOW PLOWS FOR STREET RAILWAYS.—J. G. Brill Co., Philadelphia, Pa. Pamph.; 9 × 6 ins.; pp. 16; illustrated.

This pamphlet illustrates and describes briefly the standard snow plows, snow sweepers, and track scrapers manufactured by the above named company for street railway use.

STEAM PUMPS.—Dean Bros. Steam Pump Works, Indianapolis, Ind. Pamph.; 3½ × 6 ins.; pp. 16; illustrated.

This pamphlet illustrates and describes briefly a number of the standard boiler feed and pressure pumps manufactured by the above firm. A diagram and list of parts is also given for those who wish to order parts for repairing pumps of this firm's manufacture.

RECENT BALDWIN LOCOMOTIVES.—Bethlehem Locomotive Works, Philadelphia, Pa. Pamph.; 9 × 6 ins.; pp. 32; illustrated.

This is No.7 of the series of monthly descriptive pamphlets published by the above firm and it contains illustrations of a number of locomotives recently built to American and foreign orders, the latter mostly from Brazil and Mexico.

PUMPS AND GOVERNORS.—Gardner Governor Co., Quincy, Ill. Paper; 7⅝ × 5¼ ins.; pp. 52.

The specialties included in this catalogue are various forms of steam pumps, pump and engine governors, speed and pressure governors for air compressors, balanced lever valves, and globe valves for steam engines. Price lists and tables of dimensions are given, and there are some pages of "useful information."

RESISTANCE METAL.—Herman Boker & Co., New York City. Pamph; 3½ × 7 ins.

This pamphlet contains a series of tablets in which the weights, sizes and resistances of various kinds of nickel and special resistance wires are given. The same data is given for resistance tape made of the same alloys. These tapes have a maximum length of about 300 ft., a maximum width of ¾-in. and a least thickness of between .001 and .002.

THE "NORTHWESTERN LIMITED" TRAIN: Passenger Department, Chicago & Northwestern Ry., Chicago, Ill. Pamph.; 6½ × 6 ins.; pp. 24; illustrated.

This little pamphlet contains a number of handsome half-tone views showing the interior fittings and equipment of the luxurious special passenger train recently put in operation between Chicago and St. Paul by the Chicago & Northwestern Ry. A brief description accompanies each of the engravings.

THE GRAND ARMY OF CINCINNATI. — Issued by the passenger departments of the Chicago, Indianapolis & Louisville Ry. and the Cincinnati, Hamilton & Dayton Ry. Paper; 5 × 7 ins.; pp. 24.

This is a handsome pamphlet, containing views of and information regarding Cincinnati and its surroundings, and its historic relation to the Civil War, in connection with the coming "encampment" meeting of the Grand Army of the Republic. Incidentally the advantages afforded by the two railways for transportation facilities are put forward.

ONE QUARTER OF A MILLION HORSE-POWER.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Pamph. 9 × 6 ins.; pp. 24; illustrated.

This pamphlet is a collection of especially good half-tones of Westinghouse polyphase apparatus, with brief descriptions and a list of 185 plants in this and foreign countries using such machinery. In this list are given the number and capacity of generators, motors, rotary transformers, and the transmission voltage, all of which are valuable for reference. It is unfortunate that the method of driving and rated power of engine or water wheel are omitted.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News
Sept. 8.	Plumbing, and heating,	Manitowoc, Wis.	Aug. 25
Sept. 8.	Brick paving,	Monroe, La.	Aug. 25
Sept. 8.	Macadam paving,	Shoals, Ind.	Aug. 18
Sept. 8.	Dykes,	Hudson River, N. Y.	Aug. 11
	Advertised, Eng. News, Aug. 11 to Sept. 1.		
Sept. 8.	Brick sewer,	Hammond, Ind.	Sept. 1
Sept. 8.	Buildings,	Danville, Ill.	Sept. 1
Sept. 8.	Bank protection,	New Orleans, La.	Sept. 8
Sept. 8.	Highway (2 contracts),	Boston, Mass.	Sept. 8
Sept. 8.	Pipe sewers,	Avalon, Pa.	Sept. 8
Sept. 9.	Concrete sidewalks,	Oshawa, Ont.	Sept. 8
Sept. 9.	Asylum buildings,	Buffalo, N. Y.	Sept. 1
Sept. 9.	Brick paving,	Shamokin, Pa.	Sept. 1
Sept. 9.	School buildings,	Mandan, N. Dak.	Sept. 1
Sept. 9.	Paving,	Omaha, Neb.	Sept. 1
Sept. 9.	Condenser, etc., for electric plant,	Chicago	Sept. 1
Sept. 9.	Electric plant,	St. Louis, Mich.	Sept. 1
Sept. 9.	Abutments,	Woodsfield, O.	Sept. 1
Sept. 9.	Rubber suctions,	Charleston, S. C	Aug. 11
	Advertised, Eng. News, Aug. 11 to Sept. 1.		
Sept. 9.	Sea walls,	Baltimore, Md.	Aug. 18
	Advertised, Eng. News, Aug. 18 to Sept. 8.		
Sept. 9.	Water bonds,	Sparta, Minn.	Aug.
Sept. 9.	School building,	Laharpe, Ill.	Aug.
Sept. 10.	Bridges (3),	Wichita, Kan.	Aug.
Sept. 10.	Brick paving,	Coshocton, O.	Aug.
Sept. 10.	Street improvements,	Nelsonville, O.	Aug.
Sept. 10.	Highways,	Rockville, Ind.	Aug.

Sept. 10. Improving road, Mansfield, O. .....Aug. 18
Sept. 10. School buildings (2), St. Louis, Mo. .....Sept. 1
Sept. 10. Lodge building, Fort Worth, Tex.....Sept. 1
Sept. 10. Electric plant bonds, Lancaster, Pa. .....Sept. 1
Sept. 10. Electric plant, Greenup, Ill. .....Sept. 1
Sept. 10. Brick paving, Alexandria, Ind. .....Sept. 1
Sept. 10. Dredging, Philadelphia, Pa. .....Sept. 1
Sept. 10. Dam foundation, Columbus, O.....Sept. 1
Advertised, Engineering News, Sept. 1.
Sept. 10. Sewer bonds, New Britain, Conn.....Sept. 8
Sept. 10. Sewerage system, Oakmont, Pa.....Sept. 8
Sept. 10. Engine house, Lancaster, O.....Sept. 8
Sept. 10. Water-works, Elbow Lake, Minn. .....Sept. 8
Sept. 10. Bridge abutments, Willowdale, Ont.....Sept. 8
Sept. 12. Wooden sidewalks, Wichita, Kan. .....Sept. 8
Sept. 12. Sewers, etc., Indianapolis, Ind. .....Sept. 8
Sept. 12. Improving alleys, Louisville, Ky. .....Sept. 8
Sept. 12. Grading, St. Joseph, Mo. .....Sept. 8
Sept. 12. Iron platform, Chicago, Ill. .....Sept. 8
Sept. 12. Bridge work, St. Joseph, Mo. .....Sept. 8
Sept. 12. Sewers, Sycamore, Ill. .....Sept. 8
Sept. 12. Grading, etc. (5 contracts), Kansas City, Mo. Sept. 8
Sept. 12. Garbage boat, New Orleans, La. .....Sept. 8
Sept. 12. Sidewalks (11 contracts), Kansas City, Mo. Sept. 8
Sept. 12. Paving, etc., Indianapolis, Ind. .....Sept. 8
Sept. 12. Brick sewer, Houston, Tex. .....Sept. 1
Sept. 12. Pipe sewers, etc., Faribault, Minn. .....Sept. 1
Sept. 12. Road work, Houston, Tex.....Sept. 1
Sept. 12. Bridge, Manning's Ford, Va. .....Sept. 1
Sept. 12. Repairing steamer, New York, N. Y. .....Sept. 1
Sept. 12. Paving, etc., Toledo, O. .....Aug. 18
Sept. 12. Water and sewer bonds, Mobile, Ala. .....Aug. 11
Sept. 12. Grading, paving, etc., Toledo, O. .....Aug. 11
Sept. 12. Lake outlet, Lake Manitoba, Can.....Aug. 25
Sept. 12. Bridge, Warren, Pa. .....Aug. 25
Sept. 12. Bonds, Mansfield, O.....Aug. 25
Sept. 12. Bridge, Lima, O. .....Aug. 25
Sept. 12. Paving, Youngstown, O. .....Aug. 25
Sept. 13. Aqueduct (17¼ miles), Birmingham, Eng. Aug. 25
Sept. 13. Bridge, Edmonton, N. W. Ter. .....Aug. 25
Sept. 13. Bridge work, Columbus, O. .....Aug. 25
Sept. 13. Crushed limestone, Toledo, O. .....Aug. 25
Sept. 13. Capitol building, Helena, Mont. .....July 28
Sept. 13. Brick sewer, etc., Kearney, N. J. .....Aug. 18
Advertised, Eng. News, Aug. 18 to Sept. 8.
Sept. 13. Repairing bridge, Mountain Home, Idaho...Aug. 18
Sept. 13. Building, etc., Oxford, O. .....Sept. 1
Sept. 13. Paving, Vineland, N. J. .....Sept. 1
Sept. 13. Pipe sewers, etc., Parkersburg, W. Va. .....Sept. 1
Sept. 13. Sandstone, etc., Pt. Wilson, Wash. .....Sept. 1
Sept. 13. Electrical apparatus, Norfolk, Va.....Sept. 1
Sept. 13. Pavement, New Haven, Conn. .....Sept. 8
Sept. 13. Concrete walk, New Haven, Conn. .....Sept. 8
Sept. 13. Macadamizing, Cincinnati, O. .....Sept. 8
Sept. 13. Asphalt paving, etc., Chicago, Ill. .....Sept. 8
Sept. 13. Buildings, National Military Home, Kan...Sept. 8
Sept. 13. Bonds, Sheridanville, Pa. .....Sept. 8
Sept. 13. Extending water-works, Manilla, Ia. .....Sept. 8
Sept. 13. Paving and curbing, Crafton, Pa. .....Sept. 8
Sept. 14. Macadamizing, Marshall, Tex. .....Sept. 8
Sept. 14. Electric light plant, Winchester, Va.....Sept. 8
Sept. 14. School building, Pittsburg, Pa. .....Sept. 8
Sept. 14. Removing offal, etc., New York, N. Y.....Sept. 8
Sept. 14. Brick paving, Meadville, Pa. .....Sept. 8
Advertised, Engineering News, Sept. 8.
Sept. 14. Water pump, Covington, Ky. .....Sept. 8
Sept. 14. Sewer system, Pocomoke City, Md.....Sept. 1
Advertised, Eng. News, Aug. 25 and Sept. 1.
Sept. 14. Water-works, Pocomoke City, Md. .....Sept. 1
Advertised, Eng. News, Aug. 25 and Sept. 1.
Sept. 14. School building, Pittsburg, Pa. .....Sept. 1
Sept. 14. City hall bonds, Brooklyn, O. .....Sept. 1
Sept. 14. Brick paving, Alexandria, Ind. .....Sept. 1
Sept. 14. Hospital building, Los Angeles, Cal. .....Aug. 18
Sept. 15. Enlarging court house, Lisbon, N. Dak.....July 28
Sept. 15. Fire alarm system, Mobile, Ala. .....Aug. 11
Advertised, Eng. News, Aug. 11 to Sept. 1.
Sept. 15. Light-house, Tompkinsville (S. I.), N. Y...Aug. 25
Advertised Eng. News, Aug. 25 and Sept. 1.
Sept. 15. Engine (150-HP.), New Orleans, La. .....Aug. 25
Sept. 15. Iron bridge, Natchitoches, La. .....Aug. 25
Sept. 15. Pipe sewers, etc., Santa Ana, Cal. .....Sept. 1
Sept. 15. Asphalt paving, Bloomington, Ill. .....Sept. 8
Sept. 15. Sidewalks, Louisville, Ky. .....Sept. 8
Sept. 15. Stone, cement, etc., New York, N. Y.....Sept. 8
Sept. 15. Laying water pipe, Boston, Mass. .....Sept. 8
Advertised, Engineering News, Sept. 8.
Sept. 15. Stone and screenings, New York, N. Y...Sept. 8
Sept. 15. Sewers, Cleveland, O. .....Sept. 8
Sept. 16. Sewer, Omaha, Neb. .....Sept. 8
Sept. 16. Asphalt paving, (2 contracts), Omaha, Neb..Sept. 8
Sept. 16. Railway grading (10 miles), Petersburg, Va. Sept. 8
Advertised, Engineering News, Sept. 8.
Sept. 16. Pipe sewers (6 miles), Shelby, O.....Sept. 1
Sept. 16. Brick and pipe sewer, Richmond, Ind. ....Aug. 25
Sept. 16. Supplies, Norfolk, Va. .....Aug. 25
Advertised Eng. News, Aug. 25 and Sept. 1.
Sept. 17. Storm sewer, Mansfield, O. .....Aug. 25
Sept. 17. Headstones, (10,000), Boston, Mass. .....Aug. 25
Sept. 17. Brick paving, Watertown, Wis. .....Sept. 1
Advertised, Engineering News, Sept. 1.
Sept. 17. Sewers, Washington, D. C.....Sept. 1
Advertised, Engineering News, Sept. 1.
Sept. 17. Removing wreck, St. Joseph, Mo. .....Sept. 1
Sept. 17. Electric plant, Duncannon, Pa. .....Sept. 8
Sept. 17. Pig lead, Cleveland, O. .....Sept. 8
Sept. 17. Heating and ventilation, Danville, Ill. ...Sept. 8
Sept. 19. Paving bonds, Youngstown, O. .....Sept. 8
Sept. 19. School building repairs, Rochester, N. Y...Sept. 8
Sept. 19. Pipe sewers, Toledo, O. .....Sept. 8
Sept. 19. Heating, Windsor, N. S. .....Sept. 8
Sept. 19. Water refunding bonds, Canton, O. .....Sept. 8
Sept. 19. Electric lighting, Portland, Ore. .....Sept. 1
Sept. 19. Jail building, Newport News, Va. .....Sept. 1
Sept. 19. Bridges (2), Newport News, Va. .....Sept. 1
Sept. 19. Heating and ventilating, St. Albans, Vt. ...Aug. 25
Advertised Eng. News, Aug. 25 and Sept. 1.
Sept. 19. Hospital plans, San Francisco, Cal. .....Aug. 4
Sept. 19. Jail, Lovelocks, Nev. .....Aug. 18
Sept. 19. Bridge bonds, Los Angeles, Cal. .....Aug. 18
Sept. 20. Viaduct, Cincinnati, O. .....Aug. 25
Sept. 20. Electric light plant, Grand Rapids, Mich...Sept. 1
Advertised, Engineering News, Sept. 1.
Sept. 20. Highway, Rockville, Md. .....Sept. 8
Sept. 20. Hospital building, Binghamton, N. Y. ....Sept. 8
Sept. 21. School building, New Brunswick, N. J....Sept. 8
Sept. 21. Water-works, Bristol, Va.....Sept. 1
Sept. 21. Canal, Chicago, Ill. .....Aug. 25
Advertised, Aug. 25 to Sept. 15.
Sept. 22. Hospital buildings, etc., Central Islip, N. Y..Sept. 1
Sept. 22. Electrical apparatus, Central Islip, N. Y....Sept. 1
Sept. 22. Power plant, Wrightsville, Pa. .....Sept. 8
Advertised, Eng. News, Sept. 8 and 15.
Sept. 22. Bridge bonds, Elyria, O. .....Sept. 8
Sept. 22. Levee work, New Orleans, La. .....Sept. 8
Sept. 22. Stone jetties, Green Harbor, Mass. .....Sept. 8
Advertised, Eng. News, Sept. 8 and 15.
Sept. 23. High-school building, Camden, N. J. .....Sept. 8
Sept. 23. Supplies, Watervliet, N. Y. .....Aug. 25
Sept. 24. Capitol building, Columbus, O. .....Sept. 1
Sept. 24. Electric plant, Pensacola, Fla.....Sept. 1
Sept. 24. Quay wall, San Francisco, Cal.....Sept. 1
Sept. 24. School building, Shreveport, La. .....Sept. 8
Sept. 24. Building material, Pine Ridge, S. Dak.....Sept. 8
Sept. 26. Bonds, Dayton, O. .....Aug. 25
Sept. 26. Electric plant bonds, St. Louis, Mich.....Sept. 1
Sept. 28. U. S. building, Brockton, Mass.....Sept. 1
Advertised, Eng. News, Sept. 1 and 8.
Sept. 29. Water-works, Wivenhoe, England.....Sept. 1
Sept. 29. Court house, Marietta, Ga. .....Aug. 18
Sept. 30. Improving reservoir, Albany, N. Y. .....Sept. 8
Advertised, Engineering News, Sept. 8.
Sept. 30. Coal shaft, Latrobe, Pa. .....Sept. 8
Oct. 1. Towboat, St. Louis, Mo.....Sept. 8
Oct. 1. Arc lighting, Marshfield, Wis. .....Aug. 18
Oct. 1. Monitors (4), Washington, D. C. .....July 7
Oct. 1. School building (equipment), St. Thomas, Ont. July 7
Oct. 1. Road roller, Sheboygan, Wis.....Sept. 1
Advertised, Engineering News, Sept. 1.
Oct. 1. Head-race (power plant), Montreal, Que.....Sept. 1
Advertised, Eng. News, Sept. 1 to 15.
Oct. 3. Street work, Toledo, O. .....Sept. 1
Oct. 3. Building plans, Liverpool, England.....Sept. 8
Oct. 3. Building superstructure, Philadelphia, Pa...Sept. 8
Advertised, Eng. News, Sept. 8 and 15.
Oct. 3. Bridge, Flandreau, S. Dak. .....Sept. 8
Oct. 4. Coal conveyors, etc., Chicago, Ill. .....Aug. 25
Advertised, Eng. News, Aug. 25 to Sept. 29.
Oct. 5. Bridge superstructure, Chicago, Ill.....Aug. 11
Oct. 5. Dredging, Oakland, Cal. .....Sept. 8
Oct. 5. Shore protection, Fort Morgan, Ala. .....Sept. 8
Advertised, Eng. News, Sept. 8 to 29.
Oct. 10. Turbine wheels (24), Wrightsville, Pa. .....Sept. 8
Advertised, Eng. News, Sept. 8 and 15.
Oct. 10. Trestle, Chehalis, Wash.....Sept. 8
Oct. 12. Park bonds, Spokane, Wash.....Sept. 1
Oct. 17. Gasholder, etc., Edinburgh, Scotland.....Sept. 1
Oct. 21. Dry dock, Algiers, La. .....Sept. 8
Oct. 24. Markets, etc., Belem, Brazil. .....Apr. 28
Oct. 25. Jetties, Portland, Ore. .....Aug. 25
Advertised, Eng. News, Aug. 25 to Sept. 15.
Oct. 30. School building, Chehalis, Wash. .....June 16
Oct. 31. Water supply, Cobourg, Ont. .....Sept. 8
Advertised, Eng. News, Sept. 8 to Oct. 27.
Oct. 31. Electric lighting, Cobourg, Ont. .....Sept. 8
Advertised, Eng. News, Sept. 8 to Oct. 27.
Nov. 1. Court house, Garner, Ia. .....Sept. 8
Dec. 31. Plans for station, etc., Stockholm, Sweden..June 23
Jan. 1. City hall plans, Bridgeport, Conn. .....Aug. 18
No date. Sewer & water systems, White Earth, Minn. Sept. 8

RAILWAYS.

CALIFORNIA.—J. A. Dubbs, Mgr. Mexican Sulphur Co., Pittsburg, Pa., informs us that nothing further has yet been done towards the construction of the proposed railway to the sulphur mines, about 70 miles south of Yuma, Ariz., other than the completion of two surveys, one 67 miles in length to Yuma, and the other to San Diego, Cal., on the Pacific coast, 168 miles.

CHICAGO, PEORIA & WESTERN.—This company was incorporated in Iowa, Aug. 19, with a capital stock of $50,000. It is proposed to construct and operate a railway from a point on the Mississippi River, near the glucose works, thence northwesterly through the counties of Scott, Cedar, Linn, Benton, Tama and Marshall to Marshalltown. The officers, who are all connected to the Davenport Glucose Co., are: Pres., Lee S. Harrison; Vice-Pres., Louis H. Brandt; Secy. and Treas., Carl J. Langfeldt, all of Davenport. Reference was made to this company in our issue of Aug. 4.

CLEARFIELD SOUTHERN.—P. E. McGovern writes us from Clearfield, Pa., that he has been awarded the contract for the construction of this proposed railway from Belsena Mills, Pa., to Clearfield Bridge, a distance of about 16 miles, as reported in our last issue. The new line will penetrate large timber and coal districts. Construction work has already commenced, and the work will be pushed forward rapidly. Pres., A. W. Lee, Clearfield; Ch. Engr., Samuel Bruger, Fleming, Pa.

ELDON & ST. LOUIS.—The citizens of Shelbyville, Ill., expect to raise $7,500 towards the construction of this railway and also to grant the right of way, station grounds and switchyards in Black Creek township. The company contemplates building from Milton, Ia., to Mexico, Mo., a distance of 272 miles. C. J. Du Bois, Ch. Engr., Macon, Mo., has previously informed us that no contracts will be let until all of the right of way is obtained. Pres., S. H. Sawyer, Eldon, Ia.

EL PASO & NORTHEASTERN.—It is announced that George S. Good & Co., Lock Haven, Pa., has about completed the grading on the main line from Alafogorda Junction to Toboggan Gulch. Track-laying, under the direct supervision of the company, is now in progress near La Luz, N. Mex. Pres., C. D. Simpson, Scranton, Pa.

HAMPTON & BRANCHVILLE.—Reports state that this line will probably be extended from Mauldinton to Georges, S. C., on the South Carolina & Georgia R. R., a distance of 17 miles. The company now operates about 23 miles of railway. W. H. Mauldin, Pres. and Treas., Hampton, S. C.

LOWELL & HASTINGS.—Reports state that the Lowell & Hastings R. R. will be extended north from Lowell to Belding and south from Freeport to Hastings, Mich., by a Boston syndicate; also that operations will begin soon and the road completed in three months from that time. M. L. Sweet, Gen. Mgr., Grand Rapids, Mich.

MEXICO & SAN RAFAEL.—Reports state that surveys have been commenced for a line of railway from Chalco to Rio Frio, to form part of the line projected under the charter of the Xico & San Rafael Ry. Co. Robert Gayol, Ch. Engr.

MICHIGAN.—Balch & Peppard, of Minneapolis, Minn., are stated to have been awarded the contract for the construction of a railway to connect the Franklin, Jr., and Arcadian mines with the mill sites at Grosse Point. The proposed line, including terminals and sidings, will contain about 12 miles of track. The road will be of standard gage, and is expected to be completed and ready for use by next spring.

MINNEAPOLIS & ANOKA SUBURBAN.—Reports from Minneapolis, Minn., state that trains are expected to be running to Anoka, a distance of 20 miles, over this new line, by Oct. 1. Mr. Fisher, of St. Paul, is the contractor, and the grading is being done by Page Bros. and F. H. Eddy, of Anoka, Minn. The entire system, as contemplated, will be built by two companies, and will have a total length of 185 miles, from Minneapolis to Rainy Lake. From Camden Place to Champlin it will run on along the river, and there will cross to Anoka over a new bridge. From that point it will be known as the Minneapolis, Anoka & Rainy Lake Ry., and will run 70 miles to Mille Lacs, and thence 100 miles farther to Rainy Lake.

MOBILE & BAY SHORE.—This company has been incorporated in Alabama to build a railway from Mertz station, on the Duncan branch, down to or near Portersville and Alabama Port, a distance of about 27 miles. All the rights of way for the new line have been secured. The incorporators are: W. Butler Duncan and Adrian Iselin, Jr., of New York; A. J. Russell, of Meridian, Miss.; J. C. Clarke, J. H. Mason, C. S. Clarke and E. L. Russell, of Mobile, O.

OREGON R. R. & NAVIGATION.—W. H. Kennedy, Ch. Engr., Portland, Ore., informs us that a contract was let to Hale & Smith, of Portland, July 15, for rectifying the alinement for a distance of three miles between Cascade Locks and Viento. Estimated cost of improvements, about $60,000. Pres., A. L. Mohler, Portland.

PETERSBURG.—Bids are asked by this company, a part of the Atlantic Coast Line. Until Sept. 16, for the graduation of a line about ten miles in length, beginning about two miles south of Petersburg, Va., and running southeasterly in proximity to the existing railway, as stated in our advertising columns. E. T. D. Myers, Ch. Engr., Richmond, Va.

PHILADELPHIA & READING.—It is announced that preliminary plans have been prepared for the proposed elevation of this company's tracks along 9th St., from Wallace to Huntindon St., in order to avoid all grade crossings without materially disturbing the grade of any street; estimated cost, $2,200,000. Geo. S. Webster, Ch. of Bureau of Surveys.

PORTLAND, VANCOUVER & YAKIMA.—Press reports state that this line will soon be extended from its present terminus at Brush Prairie towards the Yacolt Prairie, for a distance of 15 miles. The company was incorporated in Washington last December to operate the old Vancouver, Klickitat & Yakima Ry., a 15-mile logging road, which it purchased with the intention of extending and improving the line. Pres., L. Gerlinger, Vancouver, B. C.; Vice-Pres., J. H. Hubbard, Portland, Ore.

SUGAR CREEK.—J. M. Clark, Ch. Engr., Kanawha Falls, W. Va., informs us that this company proposes to build a line from McDonald, W. Va., to coal property several miles distant. The right of way will probably be secured soon. Not all of the capital for construction has yet been obtained, and it is not definitely known when the contracts will be let. Pres., Col. J. M. Davis, Coffman, W. Va.

SOUTHERN.—Press reports from Birmingham, Ala., state that surveys have been completed for a branch line to the mines of the Ivy Coal & Coke Co., in Walker county, and that contracts would be let as soon as possible. The new line will leave the main road at a point 28 miles west of Birmingham, and run north along Horse Creek. The extension will be only for freight service.

UTAH.—J. H. McEwen, Agent for Jesse Knight, of Provo City, Utah, informs us that he is at present making a preliminary survey in Hobble Creek canyon only in order to establish a grade and to secure the right of way for a railway projected to connect Salt Lake and Denver.

UTAH & PACIFIC.—We are informed that this company proposes to construct 75 miles of railway from Milford, Utah, south to the Utah and Nevada state line on the old grade built by the Oregon Short Line R. R. Co. Bids were to be received for this work until Sept. 5. A chief engineer has not yet been appointed. Pres., A. W. M'Cune, Salt Lake City, Utah.

WASHINGTON COUNTY.—William Kenefick, Ellsworth, Me., informs us that his section of the work on this new railway, or that part extending from Ellsworth to East Machias, Me., a distance of about 60 miles, will be completed by Sept. 15. The other contractor at work on the line is R. F. Rivinac, Calais, Me. The completed line will extend from Calais to Ellsworth, 116 miles. G. M. Rushing, Ch. Engr., Machias, Me.

WESTMORELAND JUNCTION.—A. Frank, Pres., Irwin, Pa., informs us that the surveys have now been completed and most of the right of way promised for this proposed steam line from Irwin Junction to Guffeys, Pa., a distance of five miles. The capital has been arranged for, and contracts will be awarded as soon as the stock and bonds are placed. S. A. Taylor, Ch. Engr., Pittsburg, Pa.

WISCONSIN & MICHIGAN.—Press reports from Green Bay, Wis., state that T. J. McGrath has secured the contract for constructing eight miles of railway for this company from Fairthorn Junction to Vulcan, Wis.

WILKES-BARRE & NORTHERN.—Reports state that this company's property has been purchased by J. W. Hollenbeck, E. Troxell, John Graham, John A. Schmitt, George R. Bedford, Pierce Butler and Thomas S. Barber. The railway, extending from Luzerne to Harvey's Lake, Pa., a distance of 12 miles, will probably be improved at once. The new owners will meet for reorganization purposes on Sept. 10.

WYOMING & MISSOURI RIVER.—Work will be resumed, according to reports, on this proposed line between Belle Fourche, S. D., and Aladdin, Wyo., a distance of about 18 miles. Pres., George M. Nix, Dubuque, Ia.

STREET AND ELECTRIC RAILWAYS.

PORTSMOUTH, N. H.—George W. Killoren, of Wakefield, Mass., who has the contract for making the road bed and laying the rails for the proposed electric railway in this city, commenced work on New Vaughan St., Sept. 1. It is also said that Joseph Herbert, North Hampton, Mass., is preparing to commence work on the power house.

WAITSFIELD, VT.—This town has guaranteed $50,000 towards the construction of the proposed electric railway of the Mad River Valley Electric R. R. Co., noted in our issue of Aug. 25. The proposed line will run from Montpelier to Warren, via Middlesex, Moretown and Waitsfield, a distance of about 26 miles. Pres., F. C. Kennedy, Burlington, Vt.; Ch. Engr., V. K. Nash, Woonsocket, R. I.

FITCHBURG, MASS.—The Fitchburg & Ashby Ry. Co., which was incorporated by this year's legislature, has petitioned this city for a franchise to construct a street railway. The petitioners are, Francis W. Wright, Wm. O. Loveland, E. A. Hubbard, Albert M. Wilder, Harry F. Bingham and Alonzo A. Carr.

GRAFTON, MASS.—Reports state that work was begun Sept. 1 on the proposed electric line from Grafton to Worcester, via North Grafton and Millbury Junction, a distance of about seven miles. Operation is expected to commence on Nov. 1.

MEDFORD, MASS.—The aldermen of this town have granted the Boston Elevated R. R. Co. permission to build double track lines on Main and Salem Sts.

NEEDHAM, MASS.—The Needham & Boston St. Ry. Co. is being formed in Needham, according to reports, for the construction of a street railway between Needham and Spring St. in West Roxbury. The capital stock is $10,000, and the temporary directors are, C. Atherton Hicks, Frederick G. Tuttle, Edward F. Howe, Victor M. Berthold, Francis de M. Dunn, William W. Carter, of Needham; Edwin L. Booth, of Boston.

WORCESTER, MASS.—W. H. Tylee, of Worcester, who holds the contract for building and equipping the Worcester & Clinton St. Ry., informs us that the new line is completed except that part where the state is constructing a new highway. Operations could have commenced on Aug. 1 had this road been built. The route is from Worcester

to Clinton, via Boylston, a distance of 12 miles. Pres., A. S. Paton, Leominster, Mass.; Ch. Engr., O. W. Rugg, Worcester.

BROOKLYN, N. Y.—It is reported that a plan has been agreed upon whereby the railway companies running cars over the New York and Brooklyn Bridge will, with the assent of the bridge commissioners, build two additional loops on the Brooklyn approach to the Bridge, at an estimated cost of $10,000. C. C. Martin, Ch. Engr. of the Bridge.

BUFFALO, N. Y.—The Buffalo, Tonawanda & Niagara Falls Electric R. R. Co. was incorporated Aug. 26 with a capital stock of $1,250,000, being a reorganization of the Tonawanda St. R. R. Co. It is said that the line running to Tonawanda from Niagara and Tonawanda Sts., Buffalo, which is known as the Smith Road, will be part of the new line; and that to finish the projected railway, 40 miles of new track must be laid. The new company has a franchise to operate between Tonawanda and Niagara Falls, and an application has been made in Niagara Falls for a franchise to build through that city. The directors are: Henry B. Smith, Bay City, Mich.; H. M. Gillett, Bay City, Mich.; Timothy E. Ellsworth, Lockport, N. Y.; James A. Roberts, George Sandrock and Clarence M. Howard, of Buffalo; James Low, Niagara Falls; John A. Read and Benjamin L. Rand, of North Tonawanda.

NEW PALTZ, N. Y.—Jas. G. Graham, Receiver of New Paltz & Wallkill Valley R. R. Co., Newburgh, N. Y., informs us that nothing, except necessary repairs, will be done by him towards the extension and improvement of this line. As stated in our last issue, Mr. Graham has been appointed temporary receiver of this company, incorporated Jan. 16, 1897, and operating an electric railway from the West Shore R. R. at Highland, N. Y., to New Paltz.

BLOOMFIELD, N. J.—It is reported that the township committee has given permission to the Orange & Passaic Valley Ry. Co. to rebuild its line through Bloomfield and to narrow the gage. Work is expected to begin at once.

BRIDGETON, N. J.—The Fairfield township committee passed an ordinance Aug. 31, granting the South Jersey Traction Co. a franchise to build through the township.

CRAFTON, PA.—The Crafton & Chartiers Valley Traction Co. was incorporated in Pennsylvania Sept. 6 with a capital stock of $6,000, to construct one mile of electric street railway. The incorporators are, Frank Thornburg, Pres., Clifton, Ia.; William J. Scully, Edgewood, Pa.; David C. Thornburg, Pittsburg, Pa.; Florence C. Biggert, Idlewood, Pa.; Jas. E. Duncan, Washington, Pa.

WASHINGTON, D. C.—The district commissioners have granted the Capital Ry. Co. an extension of 60 days in order to further test its underground system. This system, known as the Brown, Westinghouse, or electro-magnetic, is laid from the Navy Yard to the Navy Yard bridge, a distance of about one-half mile, and has been down for several months. Pres., A. E. Randle.——The directors of the Washington & University R. R. Co. have elected the following officers: Pres., F. C. Kennedy, of Burlington, Vt.; Vice-Pres., J. D. Croissant; Secy. D. D. Stone.——A deed has been recorded transferring the entire property, including franchises, of the Washington & Maryland Ry. Co. to the City & Suburban Ry. Co., formerly the Eckington & Soldiers' Home Ry. Co. Pres., J. T. Crosby, of the City & Suburban Co.

NORFOLK, VA.—It is reported that the Port Norfolk Electric Ry. has decided to build a 25-mile extension of its line from Norfolk to Smithfield, Va. Work is to begin as soon as possible. M. W. Mason, Gen. Mgr. and Purchasing Agt.

NATCHEZ, MISS.—Abraham Moses, Secy. and Treas. Natchez Light, Power & Transit Co., Natchez, informs us that this company will not construct the proposed six miles of electric railway until after next March, at which time the light plant is expected to be started. A perpetual and exclusive state and city franchise has been obtained, as well as the right of way in the city of Natchez and the whole county of Adams. Pres., Maurice Moses, Natchez; Ch. Engr., Erle S. Roos, 484 42d Place, Chicago, Ill.

CINCINNATI, O.—It is reported that the Mill Creek Valley St. R. R. Co. has certified an increase of its capital stock from $500,000 to $1,750,000. Pres., L. C. Weir; Secy., O. B. Brown.

CONNEAUT, O.—The council has granted the Pennsylvania & Ohio Ry. Co. a franchise to build a street car line through this city. The new line will be part of a system to connect Conneaut, Ashtabula, Geneva, Painesville and Cleveland.

SAGINAW, MICH.—Jas. B. Peter, Pres., Saginaw, informs us that the surveys for the proposed Saginaw & Frankenmuth Ry. and the preliminary work of obtaining the right of way are now in progress. The capital for construction will be provided when needed, and it is expected to award the contracts in the early part of next year. The route as projected is from Saginaw to Frankenmuth, via Bridgeport, a distance of 14 miles, and the motive power will be electricity. The chief engineer has not yet been appointed.

MILWAUKEE, WIS.—Reports state that an agreement has been made between the city and the Milwaukee Electric Ry. & Light Co. whereby the latter is to raise its tracks on Island Ave. and the city is to grade and macadamize between the tracks. Manager Beggs will supervise the improvement.

SEDALIA, MO.—The Sedalia Electric Ry. and the Sedalia & Brown Springs Electric Ry., including 15 miles of track, with their lighting plant, was sold to Stewart & Co., of New York, Aug. 26, at $400,000. It is said that the new company will be known as the Sedalia Electric Co., with officers as follows: Pres., S. H. G. Stewart, New York; Vice-Pres., John D. Crawford, Sedalia; Secy. and Treas., Carlton H. Reeve, New York.

COLORADO SPRINGS, COLO.—It is again reported that the owners of the famous cog road running up Pike's Peak have decided to change the motive power from steam to electricity. It is estimated that the cost of making the change will be about $50,000.

HULL, ENGLAND.—Bids are asked until Sept. 30 for the supply of 45 electric motor cars, 20 trail cars, two sprinkler cars, two traversing platforms, for the corporation. A. E. White, Cy. Engr., Town Hall., Hull. Thos. G. Milner, Cy. Treas.

ELECTRIC LIGHT AND POWER.

CHESTER, MASS.—E. LeRoy Gardner writes us that it has not been decided definitely to construct a plant, but it is very likely to be built. The apparatus will be contracted for separately, and the plant will be installed under the supervision of an engineer, yet to be selected. Estimated cost, $3,500. The plant will be operated by water power, and will have capacity to furnish 500 16-c. p. lights.

CAZENOVIA, N. Y.—Mr. O'Connell, Cortland, N. Y., is reported to have applied for a franchise.

GENEVA, N. Y.—L. L. Moses, of Clyde, N. Y., and Frank G. Brown, Jr., of Syracuse, N. Y., have applied for a 50-year franchise, and a contract for furnishing this town with 100 2,000-c. p. arc lights.

PORT CHESTER, N. Y.—The Port Chester Electric Lighting Co. has been granted a 99-year franchise. The company has submitted a proposition to light the city with arc and incandescent lights at $95 and $20 a year. Wm. L. Ward, of the company, may be addressed.

BENNETT, PA.—An election will be held Nov. 8 to vote on the question of issuing $25,000 in bonds for additional machinery for the plant and water-works.

DUNCANNON, PA.—Bids are asked until Sept. 17 for constructing a plant. Engr., Robt. R. Jones, Harrisburg, Pa.; Clk., A. C. Lackey.

WRIGHTSVILLE, PA.—Bids are asked by the Martic Water & Power Co. until Sept. 22 for furnishing the materials and for constructing the proposed power plant, and until Oct. 10 for furnishing 24 turbine water wheels, etc., as stated in our advertising columns. Ch. Engr., Jas. H. Harlow, Wrightsville.

HAGERSTOWN, MD.—Press reports state that the council is arranging for the construction of the proposed municipal plant to cost about $60,000. The lighting contract with the Hagerstown St. Ry. Co. expires in about two years.

WINCHESTER, VA.—Bids are asked until about Sept. 15 for furnishing the materials and for building a plant in connection with the water-works, according to reports. Chn. Com., Henry Schneider.

ATLANTA, GA.—The question of the municipal ownership of the electric plant is being considered. Judge Geo. Hillyer may be addressed.

FORSYTH, GA.—The question of building a plant is being considered, according to reports. John H. Andrews, Chn.

NEW IBERIA, LA.—Press reports state that this place will probably vote on the question of issuing $80,000 in bonds for a plant and water-works. Secy., A. J. Cammack.

NATCHEZ, MISS.—Arrangements are being made for buying machinery for the plant for A. & M. Moses, recently awarded a 10-year contract.

WINONA, MISS.—It is stated that the Blackston Mercantile Co. wants bids for furnishing and installing a plant to cost about $8,000.

LYNCHBURG, TENN.—It is stated that this place is to be supplied with electric lights.

SOMERVILLE, TENN.—This place voted Aug. 29 to issue $10,000 in bonds for a plant and water-works.

COVINGTON, KY.—Bids are asked until Sept. 6 for lighting that portion of the city now lighted by gasoline. Clk., Theo. von Hoene.

FOSTORIA, O.—Press reports state that Samuel R. Bullock, of Philadelphia, has purchased the plants of the Fostoria Light & Power Co. and the Northwestern Ohio Natural Gas Co. He proposes to erect a plant in the southern part of the city for the manufacture of fuel and illuminating gas and electric light, removing the plants already purchased to that location on completion of the new plant, which will be about Nov. 1.

McARTHUR, O.—Paris Horton, Pres. Trustees, writes us that the following submitted bids Aug. 25 for furnishing and installing a plant: Ambos Construction & Electric Co., Cleveland, O., awarded the entire construction at $4,677, except for power-house which went to local parties; J. A. Ebner & Co., Columbus; Westinghouse Electric & Mfg. Co., Pittsburg; Crocker-Wheeler Electric Co., Chicago; The Triumph Electric Co., Cincinnati; Craighead Co., Dayton, O.; General Electric Co., Schenectady, N. Y.; Fort Wayne Electric Corporation, Fort Wayne, Ind. The plant is to be completed by Oct. 15.

MINERAL POINT, O.—We are informed that the following bids were received Aug. 22 for furnishing and constructing a plant, as advertised in Engineering News: Generator, switchboards, etc.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa., $1,025; Fort Wayne Electric Corporation, Fort Wayne, Ind., $1,155. Poles, wiring, lamps, etc.—Goughmour Electric Co., Canton O., $1,475; Fort Wayne Electric Corporation, $1,625. Engine—Russell & Co., Massillon, O., $577 and $508. Boiler—Russell & Co., $815 and $775. Plant complete—Ambos Construction Co., Cleveland, O., $4,172 (accepted); King & Wentz, Canal Dover, O., $4,998. Complete machinery, without building—Ambos Construction Co., $3,854 and $3,745. Building—C. S. Rodgers, Mineral Point, $919. Building and brick smokestack—Irvinweiler & Winger, Mineral Point, $490.

XENIA, O.—The council has awarded a contract for lighting the city to the Xenia Electric Light Co.

WILLIAMSPORT, IND.—It is reported that the council has let a contract to a Chicago company for furnishing and installing a plant and water-works to cost about $37,000.

CARO, MICH.—J. H. Harris, Mgr. J. H. Harris & Co., writes us that a new plant will be built here within a year or two. Both water and steam will be used. The plant will have a capacity for 40 2,000-c. p. arc and 2,000 16-c. p. incandescent lights.

MOLINE, ILL.—Press reports state that Major Blunt, commandant of the arsenal, has awarded the contract for a 2½-miles extension of the old wing dam, to the Moline Water Power Co., at $40,000. The improvement, for which a special appropriation was made by Congress before adjournment, is expected to give 3½ ft. more head at the government water power bulkhead, and will incidentally give Moline a harbor. The work will be completed this fall.

QUINCY, ILL.—Press reports state as follows: W. B. McKinley, of Chicago, representing an eastern syndicate composed of J. M. Haynes, Geo. E. Macomber and Dr. Hill, of Vickery, Hill & Co., Augusta, Me., and Senator Wallace, Rochester, N. H., on Aug. 27 purchased the Thomson-Houston electric light plant and the gas plant owned by the same company. The purchase price was $460,000 for both. The new owners will spend $100,000 in repairs. This is the same syndicate which recently purchased the street railway here. A Chicago syndicate has offered $72,000 for the Empire electric light plant, and will probably get it.

BOSCOBEL, WIS.—The city clerk writes us that no steps have yet been taken in regard to putting in a plant and water-works. The question so far has only been under discussion.

LITTLE FALLS, MINN.—The question of building a plant and water-works is being considered, according to reports. Mayor Vasaly may be addressed.

DICKINSON, N. DAK.—The council is reported as arranging for the construction of a plant and water-works.

HELENA, MONT.—C. W. Whitley, Mgr. Helena Water & Electric Power Co., writes us the present work is completing the water power plant, increasing same to 10,000 HP. from 3,200 HP. This work will probably be completed in December. Bids for the additional water-wheels and electric generators will be considered soon. Supt., M. H. Gerry, Jr.

HAMBURG, ARK.—The question of building a plant and water-works is being considered by the Arkansas Improvement Co., according to reports.

LAKE CITY, COLO.—A. E. Reynolds, Denver, Colo., is reported to have located a reservoir site at Lake San Cristobal for the proposed power plant. The transmission station will be built at Agenta Falls, about one-third of a mile below the dam. The plant will be used mainly for furnishing power to mines, factories, etc.

SANTA ANA, CAL.—A. G. Croswell, Elec. Engr., San Francsico, Cal., is reported as interested in a company being organized to build a plant in this town; estimated cost, $8,000 to $15,000. The machinery is to consist of a compound condensing engine of 125-H.P., three 40-HP. boilers, one 60-arc-light dynamo, one 500-incandescent-light dynamo, and two 400-light dynamos for a three-wire Edison system.

COBOURG, ONT.—Bids are asked until Oct. 31 for street lighting and water supply, as stated in our advertising columns. Town Clk., D. H. Minaker.

LONDON, ONT.—It is stated that the plant of the London General Electric Co. was destroyed Aug. 30.

NEW COMPANIES.—Standard Electric Co., Parsons, Pa.; $40,000, with $4,000 paid in; Treas., A. H. Squire, Tunkhannock, Pa.; J. H. Kenney, Parsons.

Jefferson Electric Light Co., Chicago, Ill.; $50,000; M. A. Fort, Harry Ferguson, William M. Copeland.

Worthington Light & Water Co.; $4,500; Worthington, Ind.; H. C. Knight, W. C. Knight, C. S. Knight, Thomas Duncan, M. S. Polhamus.

Southern Electric Co., Charlotte, N. C.; $10,000; Pres., S. B. Alexander, Jr.

City Heat & Light Co., Fostoria, O.; $250,000; George A. Snyder.

Georgia Lighting & Heating Co., Atlanta, Ga.; $100,000; to build and lease lighting plants and to furnish light; R. H. Wilhoyte, R. J. Thurmond, Jr., of Alabama; J. F. Burke, Atlanta; W. T. Glasgow, of Tennessee.

Mitchell Electric Co., Portland, Me.; $150,000, with $2,500 paid in; to manufacture and deal in electric car brakes, car controllers and other electric devices; Pres., Thos. H. McDonnell, of Quincy, Mass.; Treas., Wm. E. Pearson, Boston.

BRIDGES.

HERKIMER, N. Y.—The town board has awarded a contract to Patten & Munson, at $4,126, for the abutments for a bridge across West Canada Creek.

NEWPORT, N. Y.—Reports state that the town board is awarding contracts for the construction of 15 iron highway bridges to replace the stone arch bridges which have been recently destroyed.

WHITE SPRINGS, FLA.—Bids are asked by C. F. Cone, White Springs, for constructing a 125-ft. wooden or iron bridge, on tubular abutments, according to reports.

CLEVELAND, O.—The county commissioners have awarded a contract to the King Bridge Co., at $5,950, for constructing the South Park bridge, and the Variety Iron Works, at $6,450, for the Four Mile Lock bridge.

ELYRIA, O.—Bids are asked until Sept. 22 for the purchase of $175,000 of 4% bridge bonds. A. B. Hayes, County Comr.

ELROY, WIS.—W. G. Kirchoffer, Engr., Baraboo, Wis., informs us that bids will be asked about Sept. 8 for a substructure, to cost about $550, and until Sept. 20 for a superstructure of one span, 64 ft. long and 16 ft. wide, on masonry. Address L. E. Dixon, Elroy.

EAU CLAIRE, WIS.—S. S. Kepler, Mayor, writes us that a contract will be let about Oct. 1 for the abutments and piers for the proposed steel bridge. Plans have been completed. T. P. Cochrane, Clk.

BURLINGTON, IA.—The county commissioners are considering the question of replacing a number of bridges which have been destroyed at a loss of about $10,000.

BLUE EARTH CITY, MINN.—T. R. Coughlin, Mankato, Minn., has been awarded a contract, at $1,200, for a bridge over the Blue Earth River, according to reports.

ST. PAUL, MINN.—Press reports state that negotiations are being made with the railway companies for the repair of the bridges at Western Ave., Westminster St., Robert St., and University Ave.

NIOBRARA, NEB.—The Canton Bridge Co., Canton, O., has been awarded a contract at $6,000 for constructing 10 county bridges.

FLANDREAU, S. DAK.—Bids are asked until Oct. 3 for constructing an iron or steel bridge, 100 ft. long and 16 ft. wide. H. W. B. Souther, County Audr.

ST. JOSEPH, MO.—Bids are asked until Sept. 12 for certain bridge work. Theo. Steinacker, County Surveyor.——Bids will soon be asked by the Chicago Great Western Ry. Co. for the construction of a steel viaduct at Grand Ave. H. Fernstrom, Ch. Engr., St. Paul, Minn.

PUEBLO, COLO.—The council has awarded a contract to the Pueblo Bridge Co., at $10,000, for constructing a bridge across the Mountain River at First St.

CHEHALIS, WASH.—Bids are asked until Oct. 10 for constructing a trestle, 1,500 ft. long, over the Chehalis River, on the Lincoln Road. Albert Schooley, County Auditor.

PORTLAND, ORE.—The Oregon R. R. & Navigation Co. will let contracts about Sept. 30 for the construction of 14 steel trestles, according to reports. A. L. Mohler, Pres. and Gen. Mgr., Portland.

SANTA BARBARA, CAL.—City Engineer Flournoy is preparing plans for a new bridge over Mission Creek, on West Ortega St.

SANTA CRUZ, CAL.—E. Mosher has been awarded a contract, at $4,000, for building a bridge over Salsipuedes Creek.

WILLOWDALE, ONT.—Bids are asked until Sept. 10 for constructing two stone abutments for a steel bridge over the west branch of the Humber River, according to reports. P. S. Gibson & Sons, Engrs.

BUILDINGS.

AMHERST, MASS.—Henry Mellen & Son, Worcester, Mass., was the lowest bidder for the erection of a veterinary laboratory and hospital stable for the Massachusetts Agricultural College at Amherst, at $17,985. H. C. Wood, of Westfield, was the next lowest bidder at $19,157.

BINGHAMTON, N. Y.—Bids are asked until Sept. 20 for the erection of a building to be used for a boiler house and laundry, and a building to be used for an isolation ward in connection with the city hospital, and for new heating apparatus. Burr W. Mosher, Cy. Clk.

BROOKLYN, N. Y.—It is reported that plans are being prepared for erecting two limestone dwelling houses at Carroll St. and Prospect Park West for Samuel Goldstein, of this city, to cost about $48,000. Arch., Montrose W. Morris, 45 Exchange Place, New York.

BUFFALO, N. Y.—Bids are asked by Henry R. Howland, Pres. Bd. of Mgrs. of the Thomas Asylum for Orphan and Destitute Indian Children, at 367 7th St., Buffalo, N. Y., until Sept. 9, for the erection of a dining hall and connecting corridor, on the asylum grounds, at Iroquois, N. Y., on the Cattaraugus Indian Reservation.

NEW YORK, N. Y.—The laboratory building of R. H. Macy & Co., at Greenwich and 12th Sts., was partially damaged by fire, Aug. 30, causing an estimated loss of $100,000.——Plans have been filed by Matthew Byrnes for a 13-story terra cotta, brick and stone hotel building, at 45th St. and 5th Ave., to cost $750,000. Archs., J. O'Rourke & Son, 203 Lexington Ave.; by Louis Lese, 231 East 60th St., for three 5-story brick flat buildings, on 105th St., near 1st Ave., to cost $75,000. Archs., G. F. Pelham, 503 5th Ave.; by Charles Gahren, 9 Mount Morris Place, for two 6-story brick flat buildings on 84th St., near West End Ave., to cost $150,000. Archs., Neville & Bagge, 217 West 125th St.; by Polstein & Cohen, 181 East 2d St., for two 6-story brick flat buildings at 332 to 336 East 8th St., to cost $80,000. Arch., M. Bernstein, 145 Centre St.; by Jas. J. Barry, 1149 Boston Ave., for five 4-story brick flat buildings at Franklin Ave. and 168th St., to cost $105,000. Arch., Edward Wenz., 1491 3d Ave.; by Louis Perlstein, 96 Monroe St., for a 6-story brick flat and store building at Oak and Oliver Sts., to cost $50,000. Arch., Chas. E. Reid, 217 West 125th St.; by M. B. Healy, 412 3d Ave., for three 5-story brick flat buildings on 96th St., near 3d Ave., to cost $90,000. Archs, Neville & Bagge; by the Globe Realty Co., 141 Broadway, for an 8-story brick flat building at 94th st. and Central Park West, to cost $275,000. Archs., J. Ware & Son and H. S. Harde, 315 West 29th St.

ORIENT POINT, N. Y.—The following bids were received by Lt.-Col. D. P. Heap, at Tompkinsville (S. I)., N. Y., for the erection of a light-house at Orient Point, N. Y.:

L. A. Guerber, 171 Broadway, New York	$16,975
F. C. Arthur & Co., 315 Girard Bldg., Phila.	19,800
Wm. H. Flaherty Co., 80-82 Reade st., New York	20,400
Houston Construction Co., Girard Bldg., Phila.	22,440
Wilkins & Kuemnerle, Betz Bldg, Philadelphia	23,500
Engineering Contract Co., 15 Broad st, N. Y.	25,500
Toomey Brothers & Co., Guilford, Conn.	17,400
A. F. Dudley, 100 Broadway, New York.	13,975

ROCHESTER, N. Y.—Bids are asked by the board of education until Sept. 19 for improvements to School Building No. 18. W. K. Gillette, Chn. Com.

WATERVLIET, N. Y.—The contract for mason, cut stone and iron work on new high school building to be erected at Watervliet has been awarvded to Chas. P. Boland, Troy, N. Y., to cost $30,000. Arch., John F. Gunson, Albany, N. Y.

CAMDEN, N. J.—We are informed that bids will be asked about Sept. 23 for erecting the new Camden high school building, for which working plans are now being prepared. The total cost of the building will approximate $95,000. It will be heated and ventilated by the hot blast system, and will have twenty class rooms, large assembly, wood and metal working rooms, locker rooms, boiler, engine, dynamo, etc. The construction will be that known as the slow burning construction, the style of architecture will be "Colonial," the exterior material will be red brick laid up in Flemish bond with black headers, all trimmings will be of white marble, the steps of granite and the roof of slate; sanitary arrangements will be the most improved. Arch., Thomas Stephen, 302 Masonic Temple, Camden.

NEW BRUNSWICK, N. J.—Bids are asked by the board of education until Sept. 21 for erecting the new French St. school building, to cost about $30,000. The contract for furnishing fire escapes has already been awarded to the Champion Iron Co., Canton, O., at $825. Arch., Geo. K. Parsell, New Brunswick.

OIL CITY, PA.—Plans are being prepared by Architect Perry, of Oil City, for a new high school building, to be erected in this city at a cost of about $40,000.

PHILADELPHIA, PA.—Bids are asked by the supervising architect, Washington, D. C., until Oct. 3, for the construction of the superstructure (except interior finish) of the U. S. mint building at Philadelphia.——Estimates are being received, according to report, for the erection of a brick, stone and iron power house for the Philadelphia Commercial Museum, at University and Vintage Aves., and Blockley Lane. Archs., Wilson Bros. & Co.——Plans are said to have been completed for the new 10-story brick, stone and terra cotta apartment building for the Singerly Apartment House Co., of Philadelphia, to cost about $600,000. Archs., Henry E. Cregier & Co., Boston, Mass.

PHILADELPHIA, PA.—The following bids were received by the supervising architect, Washington, D. C., Sept. 2, for removing the building adjacent to the U. S. post office and court house building in this city: Wilkins Kuemmerle, Philadelphia, $1,200, $400, 30 days; James Porter, Philadelphia, $725, $225, 20 days.

PHOENIXVILLE, PA.—The contract for the erection of the building for the Phoenixville Hospital is reported to have been let to George Lowry & Son, of Phoenixville, at $18,520.

PITTSBURG, PA.—The Henderson-Johnson Co., grain dealers, has been granted a permit to erect a 3-story fireproof cold storage warehouse and a 3-story storage house on Carson St., near the foot of Castle Shannon incline at South 1st St.

PITTSBURG, PA.—Bids are asked until Sept. 14 for erecting a school building for the Liberty sub-school district; deposit, $1,000. Address C. M. Bartberger, Arch., Westinghouse Bldg.; Chas. M. Sheaffer, Clk. of School Bd.

DENBIGH, VA.—Plans and specifications will soon be asked, according to reports, for a new jail building for Warwick county, to cost about $8,000. D. G. Smith, County Clk.

SHREVEPORT, LA.—Bids are asked until Sept. 24 for the erection of a school building, to cost about $30,000. W. T. Dalzell, Pres. School Bd.; J. W. Gaddis, Arch., Vincennes, Ind.

LOUISVILLE, KY.—Henry Wolters, Arch., Columbia Bldg., Louisville, has prepared plans for a steel elevator for Callahan & Sons, 13th and Lexington Sts., and has awarded the contract for the steel work to H. M. Knapp, agent for the Pittsburg Bridge Co.

CINCINNATI, O.—John J. Regan and Joseph Stein, members of the board of legislation, have united in presenting a petition to the board of city affairs, which provides for a new market house for the Court St. market, to cost $50,000.

LANCASTER, O.—Bids are asked by the city clerk until Sept. 10 for erecting a new fire engine house in this city. H. T. Mechling, Cy. Clk.

LANSING, MICH.—It is reported that the board of state auditors has decided to replace the present elevator by an electric elevator to have a speed of 300 ft. a minute.

CHARLESTON, ILL.—The contract for the erection of the new court house in this city is reported to have been let to A. G. Campfield, Richmond, Ind., at $74,500.

CHICAGO, ILL.—Frederick Ayer has been granted a permit to erect a 9-story building, to cost $200,000, at 213 and 215 Wabash Ave.——Contracts have been awarded, according to reports, for an apartment building to be erected on Drexel Boulevard, near 40th St., for Julian Blain, to cost about $40,000. Arch., Arthur Foster, 4310 Cottage Grove Ave.

CHICAGO, ILL.—Bids are asked by the Cook County commissioners until Sept. 12 for an iron platform and filing cases for the vault of the clerk of the Superior Court. D. D. Healy, Acting Supt.

DANVILLE, ILL.—Bids are asked by the National Home for Disabled Volunteer Soldiers at Danville, until Sept. 17, for the installation of a heating and ventilating apparatus in barrack buildings. For information address W. .C. Gunnell, C. E., Room 4, Post Office Bldg., Danville.

GARNER, IA.—Bids will be received about Nov. 1, it is stated, for the erection of a new 2-story stone county court house, to cost about $30,000. Arch., F. W. Kinney.

MINNEAPOLIS, MINN.—The contract for the erection of one wing of the new city hospital was let Aug. 29 to J. & W. A. Elliott, at $14,690, and for structural iron to the Wisconsin Brick & Iron Company at $5,120. The completed building will cost about $55,000.

ST. PAUL, MINN.—The following bids were received by a special committee, Aug. 25, for erecting two new elevators in court house: Crane Elevator Co., Chicago, $9,500; Angus McLeod Elevator Co., Minneapolis, $8,500; Eaton-Prince Elevator Co., W. H. Craig, Agent, Minneapolis (accepted), $7,123.

RED WING, MINN.—Bids are asked until Sept. 9 for building a new vault in the Goodhue county court house. Carl N. Llen, County Audr.

PINE RIDGE, S. DAK.—Bids are asked by the Pine Ridge Indian Agency, until Sept. 24, for furnishing a quantity of building material, consisting of assorted lumber, lime, cement, etc. Major W. H. Clapp, Aacting Agent.

FARGO, N. DAK.—Watterworth & Fee have received the contract for erecting the new Catholic cathedral in this city, at $24,000. Archs., Bassford & Donahue, St. Paul, Minn.

COLUMBIA, MO.—Senator H. H. Hohenschield, of Rolla, is said to have been chosen by the Boone county court to prepare plans for a new country poorhouse, to cost $12,000.

NATIONAL MILITARY HOME, KAN.—Bids are asked until Sept. 13 for the construction of a quartermaster and commissary building at western branch of the National Home, D. V. S. Treas., W. B. Shockley.

KANSAS CITY, MO.—Plans are being prepared for a new opera house to be built at 10th and Baltimore Sts., at a cost of about $90,000. Arch., J. C. Willlams, 561 Scheidley Bldg.

AUSTIN, TEX.—The dry-goods store of Philip Hatzfeld was destroyed by fire, Aug. 30, causing a reported loss of $125,000; insurance, $80,000.

BAKERSFIELD, CAL.—Contracts have been let for the erection of the new Scribner opera house at Wall and Chester Sts., for W. H. Scribner, to cost about $20,000. Arch., Philip Schwerdt.

WINDSOR, N. S.—Bids are asked until Sept. 19 for a heating apparatus for the public building. E. E. Roy, Secy. Bd. of Pub. Wks., Ottawa, Ont.

LIVERPOOL, ENGLAND.—Designs are asked until Oct. 3, extension of time, for new buildings for the Royal Institution. Secy., Harold Waterhouse, 3 Cook St., Liverpool.

WATER-WORKS.

CONTOOCOOK, N. H.—G. A. Curtice, Secy. Water Bd., writes us that the contract for building works has been let to John Walker, New Market, N. H. The water supply will be secured from Bear Pond. The plans and specifications were prepared by Geo. P. Hadley, Goffstown, N. H.

ENFIELD, N. H.—Ira Copeland is reported as arranging for the construction of works.

HAMPTON, N. H.—Chas. M. Lamprey, Dir. and Clk. Hampton Water-Works Co., writes us that the directors will meet next month to decide upon plans for completing the works next spring. After the meeting surveys will be made.

BOSTON, MASS.—Bids are asked until Sept. 15 for laying 34,200 ft. of 12 and 16-in. water pipe, as stated in our advertising columns. Wm. N. Davenport, Secy. Metropolitan Water Bd., 3 Mount Vernon St., Boston.

HOLYOKE, MASS.—It is stated that the water commissioners are considering methods of water filtration with a view to putting in a plant this year. It is estimated that a plant of 1,500,000 gallons can be put in for $20,000.

NATICK, MASS.—Jas. McManus, Town Clk., writes us that a proposition to change the location of the pumping station was brought before the last annual town meeting. It would involve a new method of furnishing and a new source of supply to Lake Cochituate. The matter was deferred for the present in order that it may be further investigated. The question will probably be considered next year.

NORTHFIELD, MASS.—C. H. Webster, Secy. Northfield Water Co., writes us that the contract has not yet been let for furnishing and laying about 13,000 ft. of 4 and 6-in. water pipe for the extension to Minot Brook.

TURNER'S FALLS, MASS.—Willard E. Everett, of the committee, writes us that proposals have been sent out for building an extension to the works at a cost of about $13,000.

CROMWELL, CONN.—We are informed that the Cromwell Water Co., Waterbury, Conn., is in the market for the purchase of first-class pumps of 100,000 gallons capacity. F. W. Seibert, Jr., Waterbury, may be addressed.

ALBANY, N. Y.—Bids are asked until Sept. 30 for improving Bleecker reservoir, as stated in our advertising columns. Supt., Geo. I. Bailey.

BOLIVAR, N. Y.—The Bolivar Water Co. has been incorporated with a capital stock of $16,000 by S. F. Booth, J. B. Bradley and W. P. Cook, of Bolivar.

BUFFALO, N. Y.—B. I. Crooker, Buffalo, submitted the lowest bid Aug. 31 for repairing the water-works pumping station at $9,750.

JOHNSTOWN, N. Y.—W. W. Crouse, Clk., writes us that the city has voted to sell bonds to pay for the diversion of water land damages, etc. The bonds will be sold within a few weeks.

NIAGARA FALLS, N. Y.—Walter Jones, Cy. Engr., writes us that it is proposed to extend the 12-in water main to the city line, about 7,500 ft.; estimated cost, $10,000.

RHINEBECK, N. Y.—J. M. Johnson, Millersburg, Pa., is reported to have submitted a proposition to put in works.

CAMDEN, N. J.—The National Meter Co., 86 New Chambers St., New York, is reported to have been awarded the contract for furnishing a 36-in. meter, at $3,100.

FLEMINGTON, N. J.—We are informed that the proposed works will require about seven miles of 6-in. cast-iron water pipe and three miles of 8-in. pipe, 30 hydrants, standpipe, 20 × 100 ft., valves, etc. Capt. John J. Shields, Furman Williamson, E. B. Allen and Geo. H. Large have a franchise as individuals. It is expected that they will incorporate.

NEWARK, N. J.—The Pomeroy & Middleport Water Co. has been incorporated, with a capital stock of $100,000, with $30,000 paid in, by Geo. S. Wentz, Dufton, Pa.; Jno. L. Wentz, Scranton, Pa., and Geo. MacDonald, 800 Broad St., Newark.

BEAVER FALLS, PA.—Jno. Warren, Secy. People's Water Co., writes us that the company has let all contracts for furnishing materials and for constructing the proposed works.

BENNETT, PA.—At the election Nov. 8 this place will vote on the question of issuing $25,000 in bonds for an additional pump and machinery for the works and the electric light plant.

CONNEAUTVILLE, PA.—The council is considering a report on the proposed works; estimated cost, $10,000. The water supply will probably be secured from the Nicolls Springs.

DEVON, PA.—Skelly & Weaver, Norristown, Pa., have been awarded the contract by the American Pipe Mfg. Co., 112 North Broad St., Philadelphia, for building the new reservoir. The American Pipe Mfg. Co. is now building a sand filtration plant of 1,500,000 gallons capacity at its Pickering Creek pumping station. Ch. Engr., J. W. Ledoux, Philadelphia.

MILLHEIM, PA.—An election will be held Sept. 12 to vote on the question of issuing $7,000 in bonds for works. The water supply will be secured from Philips Creek, a mile north of the town.

PITTSBURG, PA.—We are informed that the experiments of the filtration committee, which have been conducted at the Brilliant pumping station since July, 1897, were concluded Aug. 31. Work on the tabulation of the data and on the preparation of the final report is now being pushed as rapidly as possible, but this work will probably not be completed for about two months. The report will be in the nature of a recommendation to councils and the question of building will remain with them. Consult. Engr., Allen Hazen, St. Paul Bldg., New York; Res. Engr., Morris Knowles; Chn., Robt. Pitcairn.

READING, PA.—The clerk of the select council writes us that the councils have passed an ordinance providing for holding an election in November to vote on the question of a loan of $225,000 to erect a land filtration plant for the water supply.

LAUREL, MD.—We are informed that a company will be formed to build the proposed works. D. G. Adelsberger, 722 Pennsylvania Ave., Baltimore, Md., is preparing plans, etc. Wm. H. Minch, J. Stuart MacDonald and Jos. M. Cone, Baltimore, are interested.

MIDLAND, MD.—G. T. Long, Midland, writes us that a company will be organized to put in works in the spring. The water supply will be secured from a source about 1½ miles distant. Mr. Long wishes to secure prices of pipe, etc.

PARKERSBURG, W. VA.—W. I. Rittenhouse, Cy. Clk., writes us that this city voted Aug. 30 against issuing $35,000 in bonds for improving the works. The vote was 266 for and 460 against the proposition.

WHEELING, W. VA.—A. L. White, Cy. Engr., writes us that the water board has awarded the contract for furnishing a 12,000,000-gallon pumping engine to the Holly Mfg. Co., Lockport, N. Y., at $56,000. It is to be installed by May 1. The contract for the well and building has been let to L. G. Hallock, Wheeling, at $37,807.

ELBERTON, GA.—W. B. Henry, Clk. Council, writes us that the contract for furnishing the materials and for building the works has been let to Geo. J. Baldwin, Savannah, Ga. The contract is subject to the approval of the people Sept. 20 by a two-thirds vote.

MACON, GA.—The Macon Gas Light & Water Co. proposes to furnish Vineville with water. The company has petitioned the court for permission to build a stand-pipe and reservoir.

SYLVANIA, GA.—The mayor writes us that it is proposed to have an artesian well and to build water-works. Population, 800.

HUNTSVILLE, ALA.—S. Meyers is reported to have been awarded the contract for erecting a new pumping station at about $15,000. There will be three pumps with a capacity of 9,000,000 gallons a day.

NEW IBERIA, LA.—Press reports state that this place will soon vote on the question of building works and a light plant to cost about $80,000. Population, 4,000. Secy., A. J. Cammack.

CLARKSVILLE, TENN.—The question of either sinking wells for a purer water supply or of building a filter plant is being considered, according to reports.

FAYETTEVILLE, TENN.—R. A. Conger, Cy. Clk., writes us that the question of issuing $30,000 in bonds for gravity works will probably be voted upon soon. Engrs., Guild & Co., Chattanooga, Tenn.

SOMERVILLE, TENN.—This place voted Aug. 30 to issue $10,000 in bonds for works and a light plant.

COVINGTON, KY.—Bids are asked by the South Covington & Cincinnati St. Ry. Co. until Sept. 14 for furnishing a 4,000,000 gallon pumping engine, etc. Engr., A. C. Harrington, Newport Power Station, Newport, Ky.

LOUISVILLE, KY.—The following bids were received Sept. 1 by the Louisville Water Co. for erecting a filtration plant, all local bidders: Fred. Hoertz & Co., $297,764; Edward Hely, $299,716; Myer & Coyne, $337,870. Ch. Engr., Chas. Hermany.

MT. STERLING, KY.—Geo. W. Baird, Mayor, writes us that the town will vote in November on the question of issuing $80,000 in bonds for works. The supply will be secured from a creek 4½ miles distant.

CANTON, O.—Bids are asked until Sept. 19 for the purchase of $15,000 of 5% water-works refunding bonds. Cy. Clk., L. N. Ley.

CLEVELAND, O.—Bids are asked until Sept. 17 for furnishing 100 tons of pig lead for the water-works department. Dir. Pub. Wks., Geo. R. Warden.

ELYRIA, O.—W. J. Hayes & Son, Cleveland, O., have been awarded the purchase of $150,000 of water-works extension bonds and $45,000 of water-works purchase bonds. It is probable that the contract for the improvements to the works will be let at once; the bids having been received Aug. 24. Cy. Clk., W. H. Park.

TROTWOOD, O.—The Water-Works Supply Co., it is stated, will begin the construction of its proposed works at once. Capital stock, $5,000. M. G. Pfoutz, T. M. Wagner and Dr. W. C. Mendenhall may be addressed.

WILLIAMSPORT, O.—Press reports state that this place has let a contract for building works and a light plant at $37,000.

NEW BOSTON, O.—Levi D. York, Portsmouth, O., it is stated, will build works at once for this place.

BLOOMINGTON, IND.—The City Water-Works Co. has been incorporated with a capital stock of $25,000 by Jos. D. Showers, H. F. Perry and W. J. Allen.

EVANSVILLE, IND.—Geo. F. Welkel has been awarded the contract for erecting the new water-works buildings and smokestack at $57,500.

NEW ALBANY, IND.—Press reports state as follows: Frank Scheffold, ex-Supt. New Albany Water Co., is at the head of a movement to organize a new company, said to be composed of Louisville and New Albany capitalists, and it is claimed that a franchise will be asked for from the council at a meeting of that body next month. It is said that the proposed company can put in complete works for $125,000. The old water company is making an effort to have its charter extended.

HOUGHTON, MICH.—The question of building an addition to the works for an increased water supply at a cost of about $20,000 is being considered.

LAKE FOREST, ILL.—The water-works company has had Alvord & Shields, The Rookery, Chicago, report upon the economical operation of the Lake Forest Water-Works. Extensions will probably be made in the course of another year to the inlet pipe and pumping station.

STREATOR, ILL.—The city council has engaged Alvord & Shields, Chicago, to make a report on the sufficiency of the fire protection afforded by the water company, under the terms of its franchise.

BOSCOBEL, WIS.—The city clerk writes us that no steps have yet been taken with regard to building new works and a light plant.

DES MOINES, IA.—This city voted Aug. 29 against the proposition to buy the water-works for $850,000.

MANILLA, IA.—Bids are asked until Sept. 13 for extending the present small city works, according to reports. Population (1890), 526. Mayor, C. O. Campbell.

PELLA, IA.—Bids were asked by the city clerk until Sept. 7 for constructing works, according to reports.

CLARA CITY, MINN.—Press reports state that K. H. Holian, Recdr., wants bids for constructing works.

ELBOW LAKE, MINN.—Bids are asked until Sept. 10 for constructing works. Recdr., W. E. Landeene; Pres., J. S. Jacobson.

LITTLE FALLS, MINN.—Estimates for works and a light plant are being secured, according to reports.

WHITE EARTH, MINN.—Bids are asked by J. H. Sutherland, U. S. Indian Agent, for constructing works and sewers for the White Earth reservation.

DICKINSON, N. DAK.—It is stated that this place is considering the question of works and a light plant.

ARKANSAS CITY, KAN.—The council has authorized the mayor to issue $95,000 in bonds for the purchase of the works of the Arkansas City Water Co.

PLATTE CITY, MO.—The question of building works is being considered.

COLORADO, TEX.—The Colorado Water-Works Co. has been incorporated with a capital stock of $5,000, by Benj. S. Van Tuyl and R. M. Webb.

WICHITA FALLS, TEX.—J. B. Quigley, of Sedalia, Mo., and Chas. Carrol have applied for a franchise for works and a light plant.

CRIPPLE CREEK, COLO.—J. Stanley Jones, as chairman of the mass meeting Aug. 15 to discuss the water question, has appointed a committee to further investigate the subject of municipal works.

TACOMA, WASH.—The residents of the north end have asked the council to furnish that portion of the city with more water.

CONDON, ORE.—H. Orchard has submitted a proposition to put in works to cost about $3,000.

HEALDSBURG, CAL.—The San Francisco Bridge Co., San Francisco, Cal., is reported to have been awarded the contract for building the works at $31,700. The Oakland Bank of Savings has purchased $82,650 of bonds for the works and the electric plant.

PASADENA, CAL.—The committee is reported to have recommended the construction of new municipal works to cost about $250,000.

MONTREAL, QUE.—Walter E. Wood has been awarded the contract, at $1,800, for digging a ditch across the Ogilvie dam on the Lower Lachine Road in connection with the water-works.

COBOURG, ONT.—Bids are asked until Oct. 31 for furnishing this city with a water supply and street lighting, as stated in our advertising columns. Town Clk., D. H. Minaker.

OSHAWA, ONT.—John Galt, Canada Life Bldg., Toronto, Ont., is making surveys and plans for the proposed works and a sewerage system.

IRRIGATION.

DENVER, COLO.—Reports state that the South Platte Land, Reservoir & Irrigation Co. will repair its canal and build three miles additional, making a total length of 33 miles. Water will be taken from the Platte River and stored in reservoirs.

DINUBA, CAL.—The Alta Irrigation District received bids Sept. 6 for the enlargement of the district system. W. P. Boon, Secy.

NILES, CAL.—Press reports state that Joseph Tyson, Henry Tyson, E. A. Ellsworth, Joseph Shinn, C. B. Overacker, Wm. Brier and George Lowery have started to sink wells from which water will be pumped for irrigating purposes.

SAN RAFAEL, CAL.—Press reports state that W. Bradbury, of San Francisco, has made known his intention to purchase a water site on the property of the American Land & Trust Co., near Larkspur. This is a natural gorge near the base of Mount Tamalpais with a living stream. A dam will be constructed which will make a lake covering more than 25 acres. Mr. Bradbury calculates that the lower end of the county can be supplied with water from this source.

NEW COMPANIES.—Rawlins Reservoir Co., Cheyenne, Wyo.; $5,000; to sell water for canals, reservoirs, etc.; E. Dickinson, John B. Berry and Erastus Young.

Dry Creek Irrigation Co., Monroe, Utah; $6,000; Moroni Hunt, Pres.; Abraham Sorensen, Secy; William Norgren, Treas.; F. W. Hunt, M. L. McNamara.

SEWERAGE.

HARTFORD, CONN.—Jos. C. Smith has been awarded the contract for building sewers in four streets, at $4,917.

NEW BRITAIN, CONN.—Bids are asked until Sept. 10 for the purchase of $50,000 of 4% 30-year sewer bonds. A portion of this amount will be used for new sewers and a portion to pay the expenses of a committee to investigate the question of sewage disposal. Chn. Com., S. H. Stearns.

WESTERLY, R. I.—The council is considering plans for a system, to cost about $193,000. The outlet, it is proposed, will empty into the Pawcatuck River, near the Rock. Consult, Engrs., Shedd, Sarle & Shedd, Providence, R. I.

BALLSTON SPA, N. Y.—The question of appropriating $4,000 for repairing and extending the Gordon Creek sewer will be voted upon.

AVALON, PA.—Bids are asked until 4 p. m. Sept. 8 for building 10 and 8-in. pipe sewers in a number of streets; check, $500. Engr., Jno. McBride, 341 Fourth Ave., Pittsburg; Treas., J. C. McDowell.

GETTYSBURG, PA.—I. L. Kendlehart, Secy. Town Council, writes us that nothing definite has been done about extending the sewers. It will probably be necessary to secure advice from an expert before anything is done.

NEW KENSINGTON, PA.—W. D. Snyder, Secy., writes us that the contract for building certain sewers has been let to Ott Bros., Allegheny, Pa.

OAKMONT, PA.—Bids are asked until Sept. 10 for constructing 58,350 ft. of 30 to 8-in. pipe sewers, 80 manholes, 25 flush tanks, etc. Engrs., Edeburn, Cooper & Co., 410 Grant St., Pittsburg, Pa.

PHILADELPHIA, PA.—The board of surveyors has approved plans for a 9-ft. brick sewer in 55th St.; estimated cost, $20,000.

PITTSBURG, PA.—The question of building a 4-ft. main sewer to drain a portion of the East End is being considered. Dir. Pub. Wks., E. M. Bigelow.

CONCORD, N. C.—W. F. Dowd, Charlotte, N. C., has been awarded the contract for furnishing the materials and for building a system. There will be required 9,000 ft. of 15 to 8-in. pipe.

AIKEN, S. C.—This place voted Aug. 25 to issue $10,000 in bonds, in addition to the $15,000 voted some time ago, for the proposed system. The council will probably ask for bids at once.

BIRMINGHAM, ALA.—Jas. L. Sandefer has petitioned the Chancery Court for an injunction restraining the city from emptying its sewage into Valley Creek.

MEMPHIS, TENN.—The Nashville, Chattanooga & St. Louis R. R. Co. has agreed to build a culvert 800 ft. long from Main and Georgia Sts. to Clay St., in order to drain a portion of the city, etc. It will be 6 or 8 ft. in diameter. City Engineer Bell is preparing plans.

CLEVELAND, O.—Bids are asked until Sept. 15 for building sewers in three streets. Dir. Pub. Wks., Geo. R. Warden.

EAST LIVERPOOL, O.—This place has voted to issue $15,000 in bonds for sewers and paving, according to reports.

TOLEDO, O.—Bids are asked until Sept. 19 for building a 15-in. pipe sewer in Greenwood Ave. Cy. Clk., L. P. Harris.——J. T. McKinney will be awarded the contract for building a 5-ft. sewer in Adams St. at $33,911.

INDIANAPOLIS, IND.—Bids are asked until Sept. 12 for pipe sewers, etc., in certain streets. Pres. Bd. Pub. Wks., M. A. Downing.

SYCAMORE, ILL.—Bids are asked until Sept. 12 for building sewers to cost $5,000. An outlet for the present for the proposed system will be into the Kishwanken River. It is proposed to defer the construction of the disposal works until the main sewer and some of the branches are complete. Engrs., Alvord & Shields, The Rookery, Chicago; Cy. Clk., J. D. Berkler.

MILWAUKEE, WIS.—Bids were asked by the board of public works until Sept. 6 for constructing Section No. 6 of the 30th St. tunnel sewer. This section will cost about $75,000.

WHITE EARTH, MINN.—Bids are asked by Jno. H. Sutherland, U. S. Indian Agent, White Earth Agency, for building sewers and water-works for the reservation school.

OMAHA, NEB.—Bids are asked until Sept. 16 for building a sewer in district No. 231. Secy. Bd. Pub. Wks., Wm. Coburn.

JOPLIN, MO.—E. C. H. Squire, Cy. Clk., writes us that the city voted Aug. 23 to build, by a direct tax, 18,000 ft. of 20 and 10-in. pipe sewers; average cut, 9 ft. The work will not be started until the spring. There will be let in about 30 days a contract for 5,100 sq. yds. of brick paving. Cy. Engr., S. J. McKee.

VICTOR, COLO.—Andrew Rosewater, Bee Bldg., Omaha, Neb., has submitted plans for a system to cost about $57,980. Michael Donavan has applied for a 10-year franchise to build and operate the system. Mayor Doyle is opposed to granting a franchise.

OSHAWA, ONT.—John Galt, Canada Life Bldg., Toronto, Ont., is making plans for a system and water-works.

GARBAGE DISPOSAL—STREET CLEANING.

BRIDGEPORT, CONN.—Local papers state that the Connecticut Reduction Co. has given up its contract for destroying the garbage of this city, for which it was awarded the contract three years ago. The board of health is said to be undecided how to destroy the garbage. Pres. Connecticut Reduction Co., Frank E. Clark.

WEST HAVEN, CONN.—Reports state that Swift & Co. will construct a crematory for the disposal of refuse at the slaughter house in Allingtown. Health Officer Bevan may be addressed.

BINGHAMTON, N. Y.—A. H. Abbott, Secy. Bd. of Health, writes us that the board has laid the matter of garbage disposal before the council. It has promised to have an amendment to the charter so as to appropriate a sufficient sum to build a crematory in 1899.

NEW YORK, N. Y.—Bids are asked until Sept. 14 for removing the night soil, offal and dead animals from the Boroughs of Queens and Richmond. M. C. Murphy, Pres. Dept. of Health, Centre and White sts.

UTICA, N. Y.—T. E. Kinney, Mayor, is urging the council to bury the city garbage. The mayor has appointed E. Prentiss Bailey and Geo. E. Dunham to confer with the board of health regarding the matter.

MONTCLAIR, N. J.—We are informed that a conference has been arranged between committees from several boards with regard to a garbage disposal plant. The question is undecided and nothing may be done for some time. W. O. Leighton, Health Inspector.

CHESTER, PA.—The board of health is reported to have recommended to the council the construction of a plant to cost about $2,000 or $4,000.

READING, PA.—The committee will consider the question of increasing the capacity of the garbage plant, from 25 to 80 tons per day. H. L. Boas may be addressed.

HAGERSTOWN, MD.—M. L. Byers, Cy. Clk., writes us that no definite action has been taken with regard to a garbage disposal plant.

WHEELING, W. VA.—A. L. White, Cy. Engr., will visit eastern cities this week to investigate methods of garbage reduction, disposal, etc., and will make a report on the subject.

NEW ORLEANS, LA.—Bids are asked until Sept. 12 for constructing a new garbage boat. Jno. F. Butts, Comptroller.

CHATTANOOGA, TENN.—A crematory will be built at Camp Thomas at once, according to reports. Capt. H. P. Young has charge of the sanitary department. J. J. Fisher, of Chattanooga, is said to have prepared the plans.

MILWAUKEE, WIS.—The committee is reported to have decided to recommmend for adoption by the council the plans of the Dixon Garbage Cremation Co., Toledo, O. This company proposes to build a plant for $58,000.

STREETS AND ROADS.

REVERE, MASS.—The following bids were received Aug. 22 for grading, etc., on the Revere Beach Parkway, between Elliot Circle and Campbell Ave., as noted in our issue of Aug. 18: Walter R. Brown, Lowell, $25,055; Thos. H. Gill, Somerville, $23,334; Mirick & Wentworth, Malden, $22,715; Richard Falvey, Somerville, $21,465; Martin Gill & Co., Somerville, $20,723; Joseph D. Gennaro, Boston, $18,896; B. D. Pierce Co., Bridgeport, Conn., $18,384; McCusker Bros., Waltham, $17,842; George A. Lancaster, Revere, $17,542; Cogan Bros. & Forschner, Atlantic, $16,943; Owen Cunningham & Son, Somerville, $16,150; Jas. J. Welch & Co., Salem, $15,636; Thos. Hurley, Lynn, $15,605; Johnston, Haines & Letteney, Boston, $14,877; J. A. Whittemore's Sons, Boston, $14,472. Edwin B. Haskell, Park Comr.; Wm. T. Pierce, Engr.

BOSTON, MASS.—Bids are asked until Sept. 8 for building two sections of the State Highway, 2,600 and 2,900 lin. ft., respectively (two contracts); check for each, $250. T. C. Mendenhall, Pres. Massachusetts State Highway Comn.

PITTSFIELD, MASS.—The aldermen have made appropriations for draining and repairing Allen Ave., between Dunham and School Sts.; for grading a portion of Appleton Ave., and for repairing North John St., according to report. A. A. Fobes, Cy. Engr.

SOMERVILLE, MASS.—Martin Gill & Co. have been awarded the contract for surfacing a portion of Middlesex Ave., consisting of 1,000 cu. yds. of earth grading, 2,000 sq. yds. of gravel surfacing and 4,200 sq. yds. of foundation and broken stone surfacing. E. M. Bailey, Cy. Engr.

WORCESTER, MASS.—The Boston Paving Co. has been awarded the contract to lay 25,000 sq. ft. of granolithic sidewalk, curbing and gutter paving at Richmond Heights, on Pleasant, Lenox and Beeching Sts., according to report. Lucien B. Stone, Comr. of Sts.

CROMWELL, CONN.—The B. D. Pierce, Jr., Co., Bridgeport, has received the contract to construct 4,100 lin. ft. of macadam roadway, at a cost of $3,010, according to report. C. S. Pease, Selectman.

HARTFORD, CONN.—The following bids were received for grading a roadway in Pope Park: Fred. T. Ley & Co., $1,175; H. J. Mullen, $835; R. F. Hudson, $1,258; R. W. Sherman, $1,067; A. H. McElwain, $786; Peter Suzio, $888. The bids were referred to C. H. Bunce, Cy. Engr., to ascertain the responsibility of the lowest bidder.

NEW HAVEN, CONN.—Bids are asked until Sept. 13 for constructing a broken stone pavement on Dixwell Ave., from Division St. to the city limits. Bids are also asked until Sept. 13 for laying a concrete walk and curbing on the easterly causeway of Tomlinson Bridge. C. W. Kelly, Cy. Engr.

ALBANY, N. Y.—The Callahan Road Improvement Co., 51 State St., received the contract, Sept. 2, to improve two miles of the Troy and Schenectady Turnpike, at $14,590, according to report. Campbell W. Adams, State Engr., Utica.

BROOKLYN, N. Y.—It is reported that bids will soon be asked for grading and paving a number of streets, among them portions of Regent Place, Pacific St., Park Place, Himrod St., 84th St., Ave. B. and Ocean Ave. N. P. Lewis, Engr. of Highways.

NEW ROCHELLE, N. Y.—At a special election, Aug. 30, the resolution to issue $150,000 for street improvements was defeated by a very small majority. H. S. Clarke, Village Pres.; G. R. Olney, Supt. Pub. Wks.

NEW YORK, N. Y.—Bids are asked until Sept. 15 for furnishing broken stone and screening of trap rock and gravel and delivering the same along certain streets in the borough of Queens. Jas. P. Keating, Comr. of Highways.

ROCHESTER, N. Y.—H. B. Hooker was awarded the contract Aug. 29 to macadamize Ave. B for $6,152; also to construct cement walks on Chili Ave. for $2,555. Chambers & Casey received the contract to improve Post St. for $1,684. Edwin A. Fisher, Cy. Engr.

ATLANTIC CITY, N. J.—It is reported that Mayor Jos. Thompson has approved the street paving ordinance noted in our last issue; the estimated cost of the work is $150,000. John P. Ashmead, Cy. Engr.

ELIZABETH, N. J.—It is stated that bids will be asked next week by the county board of freeholders for widening the road from Elizabeth to Plainfield, a distance of 12 miles. An issue of $75,000 of bonds will probably be authorized in addition to $250,000 received from John Kean for a franchise for an electric railway between these cities.

GLOUCESTER CITY, N. J.—The council has postponed the opening of bids for the paving of Broadway, between Salem and Market Sts., as noted in our last issue, until Sept. 15, according to report. Edw. J. O'Hara, Chn.

NEWARK, N. J.—G. W. Sharp & Son have been awarded the contract to lay the cement pavement in and about the new City Hospital at $940. Dr. Herold, Pres. Bd. of Health.——The following contracts were awarded Aug. 25 for paving, as noted in our issue of Aug. 18: New Jersey Asphalt Co., 736 Broad St., Newark, part of North 7th St., brick, $5,541; North 7th St., asphalt, $3,889; Fulton St., asphalt, $6,114; South 7th St., asphalt, $43,720. Barber Asphalt Paving Co., New York, Lincoln Park, from Washington St. to Clinton Ave., asphalt, $1,789. Atlantic Alcatras Asphalt Co., New York, Sidney Place, asphalt, $1,963; Broome St., asphalt, $6,701; Ninth Ave., asphalt, $11,415. M. F. McLaughlin, Gen. Supt. St. and Water Comrs.

CRAFTON, PA.—Bids are asked until Sept. 13 for paving and curbing White Ave., between Noble Ave. and Station St. F. A. McDonald, Borough Engr., 811 Penn Bldg., Pittsburg; R. H. Thomson, Borough Clk.

ERIE, PA.—M. Whitman has been awarded the contract to gravel Ash St., at 35 cts. a sq. yd., according to report. Benj. E. Briggs, Cy. Engr.

MEADVILLE, PA.—Bids are asked until Sept. 14 for 1,480 sq. yds. of brick paving, etc., as described in our advertising columns. D. T. McKay, Jr., Cy. Clk.; W. A. Doane, Cy. Engr.

NEW KENSINGTON, PA.—W. D. Snyder, Secy., writes us that the bids received Aug. 31 for paving were all too high and were rejected. The council will readvertise at once for new bids.

PITTSBURG, PA.—Contracts were awarded Aug. 30 for the improvement of portions of three roads, as follows: Beaver Road, Booth & Flinn, $43,064; Kittanning Road, Keeling & Ridge, $29,161; Library Road, Booth & Flinn, $40,901. W. W. Murray and J. A. Clark, County Comrs.; Fred. W. Patterson, County Engr.

SHARPSBURG, PA.—E. C. Hulbert, Cy. Engr., writes us that the borough has decided to issue $60,000 bonds for the purpose of repaving all the cobble streets with modern pavement. There are about 45,000 sq. yds. of paving to be done, and the work will be pushed at once.

ROCKVILLE, MD.—Bids are asked until Sept. 20 for grading, masonry and macadam paving necessary in constructing a highway from Rockville, Md., to Washington, D. C. W. W. Welsh, Clk. County Comrs.; Taylor Gleaves, Constr. Engr., Lynchburg, Va.

LOUISVILLE, KY.—Bids are asked until Sept. 12 for improving portions of six alleys by grading, curbing and vitrified brick or block paving. Bids are also asked until Sept. 15 for improving the sidewalks on nine streets by regrading, recurbing, supplying metal gutters and brick paving. Thos. P. Craig, Secy. Bd. Pub. Wks.——The council has refused to approve the awarding of the contracts for asphalt paving to the Assyrian Asphalt Paving Co., according to report.

CINCINNATI, O.—Bids are asked until Sept. 13 for improving Bell Place, from Locust St. to 267 ft. south, by grading, curbing and macadamizing. A. B. Rattermann, Pres. Bd. of Cy. Affairs; Geo. H. Spellmire, Clk.——Ruebel Bros. have been given the contract at $6,108, to improve Red Bank Ave.

CLEVELAND, O.—The council has passed an ordinance to grade, curb and pave Hayward St. from Cedar to Central Aves. Geo. H. Billman, Pres.; Howard H. Burgess, Cy. Clk.

YOUNGSTOWN, O.—Bids are asked until Sept. 19 for the purchase of $20,000 bonds for paving Scott St., between Wick and Belmont Aves., $1,500 bonds for grading and improving Seneca St., between Oakland and Delaware Aves., and $400 bonds for constructing a sewer on Hogue St. F. C. Brown, Cy. Clk.

INDIANAPOLIS, IND.—Bids are asked until Sept. 12 for grading, curbing, gravel paving and building cement sidewalks on Tacoma Ave., from 10th St. to the south bank of Pogue's Run; check, $1,000. M. A. Downing, W. Scott Moore and T. J. Montgomery, Bd. Pub. Wks.

DETROIT, MICH.—It is reported that the board of works will call for bids for paving Cass St. from Lafayette to Michigan Sts., with asphalt. D. W. H. Morelands, Comr. Pub. Wks.

BLOOMINGTON, ILL.—Bids are asked until Sept. 15 for 480 ft. of stone curbing and about 1,100 sq. yds. asphalt paving on Centre St. C. F. Koch, Pres. Bd. of Local Improvement.

CHICAGO, ILL.—Bids are asked until Sept. 13 for 4,750 sq. yds. of asphalt paving, 2,245 lin. ft. of granite concrete curb, two new catch basins with connections, seven wooden catch basin covers replaced by iron covers and set, two wooden manhole covers replaced by iron covers and set, 390 cu. yds. of common filling, 170 cu. yds. of black soil, 1,300 sq. yds. of sodding and 25 elm trees, all for the West Chicago Park Commissioners; check, 10% of bid. Anton Peterson, Pres. Bd. of Local Improvements of the West Chicago Park Comrs.; Ernest G. Schubert, Secy.

EAU CLAIRE, WIS.—S. S. Kepler, Mayor, writes us that an ordinance has been passed providing for the laying of new vitrified brick pavements on certain streets and the removal of the old cedar blocks; also for the purchase of a 12-ton steam road roller. It is not expected, however, to contract for paving before 1899. T. P. Cochrane, Cy. Clk.

RACINE, WIS.—The board of public works rejected all bids for the grading of Kewaunee St., Aug. 27. Fred. Nelson was awarded the contract for the filling of La Salle St. at 11 cts. a cu. yd. O. Burlingame, Cy. Engr.

ST. PAUL, MINN.—L. W. Rundlett, Cy. Engr., has prepared plans and estimates for paving 10th St. from St. Peters St. to Rice St., and Rice St. from that point to the Great Northern Ry. tracks. The estimated cost is $20,000 for asphalt, $19,000 for sandstone and $17,000 for brick.——The board of public works is reported to be contemplating the construction of 25 miles of cement sidewalks.

WICHITA, KAN.—Bids are asked until Sept. 12 for the completion of three 5-ft. unfinished wooden sidewalks; check, $10. H. T. Kramer, Cy. Clk.

OMAHA, NEB.—Bids are asked until Sept. 16 for grading Fowler Ave. from Florence Boulevard to 24th St. Bids are also asked until Sept. 16 for curbing and paving 32d Ave., from Lincoln Ave. to Dorcas St., with asphalt, brick or stone; check, 2% of bid. Andrew Rosewater, Chn. Bd. Pub. Wks.; Wm. Coburn, Secy.

JOPLIN, MO.—E. C. H. Squire, Cy. Clk., writes us that the contracts for street paving will be let this month. S. J. McKee, Engr.

KANSAS CITY, MO.—Adam Armstrong was awarded the contract, Aug 24, for macadamizing the roadways and constructing artificial stone crosswalks on the Paseo drives at a cost of $46,000 for the former, and $800 for the latter. A contract was also awarded to the Dugan Cut Stone Co. to construct the South Paseo Park fountain at $9,382, according to report. R. W. Godfrey, Secy.

KANSAS CITY, MO.—Bids are asked until Sept. 12 for constructing a natural stone sidewalk on the west side of Troost Ave., between 8th St. and 9th St.; also for constructing granitoid sidewalks on 10 streets (separate bids for each); check with each bid, $200. Bids are also asked until the same date for grading 25th St., between Cherry and Holmes St.; for 136 lin. ft. of curbing on Bank St., for paving Central St. with vitrified brick, for paving Amarette St. with the same, and for paving the alley between Grand Ave. and McGee St. with the same (five contracts; check, $200 each). Henry A. Wise, Cy. Engr.

MARSHALL, MO.—The city council rejected all the bids received Aug. 29 for macadam paving and curbing, as noted in our issue of Aug. 18, on account of the bids being above the estimate of the street commissioners. Bids are again asked for until Sept. 14 for the same work. A. R. James, Cy. Clk.

ST. JOSEPH, MO.—Bids are asked until Sept. 12 for grading St. Joseph and De Kalb Road; check, $15. Theo. Steinacker, County Surv.

OREGON CITY, ORE.—J. Henry Smith, C. E., writes us that the contracts recently awarded to Danl. Lyons amounted to about 900 lin. ft. of roadway on the side of a bluff at a cost of about $2,400. More extensive work is promised for the near future.

WESTMOUNT, QUE.—At a council meeting Sept. 6, a resolution was to be introduced to open the Boulevard from its present terminus westerly to Glencoe Ave. Wm. Mints, Secy. and Treas.

OSHAWA, ONT.—Bids are asked until Sept. 9 for the construction of 500 lin. ft. of 8-ft. concrete sidewalks. John Bailes, Chn. Bd. of Wks.; Thomas Morris, Acting Clk.

MANUFACTURING PLANTS

NEW MILFORD, CONN.—The factory of the New Milford Hat Co. was destroyed by fire Sept. 5, causing a loss of about $40,000.

NEW YORK, N. Y.—A fire in this city, Sept. 3, destroyed the works of the East Side Rubber, Bone & Ivory Works, 2220 to 2228 1st Ave., and 401 and 403 East 124th St., causing a reported loss of $60,000.——The drug and chemical factory at 3d Ave. and 18th St., occupied by Eimer & Amend, was damaged by fire, Sept. 5, causing an estimated loss of $125,000.

TROY, N. Y.—It is reported that Cluett, Coon & Co., shirt and collar manufacturers, will soon erect a new 6-story addition to their plant on River St.——Also that Searle, Gardner & Co., collar manufacturers, will erect a new factory building at River and Middleburgh St.

NEWARK, N. J.—A third fire occurred in the works of the Celluloid Mfg. Co., Sept. 4, causing a reported loss of over $100,000.

CHESTER, PA.—It is reported that Robert Wetherill & Co., boiler and engine builders, have awarded the contract to build a new foundry, 146 x 65 ft., on East 7th St., to Alva R. Kerr & Co., of Eddystone, Pa.

MAUCH CHUNK, PA.—The Keystone Construction Co., of Easton, is said to have been awarded the contract for furnishing and erecting the structural iron for the new plant to be built at Hazards by the Lehigh Zinc & Iron Co. Fourteen large buildings are expected to be built.

STATESVILLE, S. C.—Reports state that the Statesville Cotton Mills will purchase additional machinery to increase its capacity by one-third, at a cost of $14,580. The present equipment is 6,000 spindles and 180 looms.

DETROIT, MICH.—Plans have been prepared, according to reports, for a new plant and bottling works for the Union Brewing Co.; estimated cost, $50,000. Mgr., Joseph Alpel, 837 Leland St.; Arch., Gustav A. Mueller, Union Trust Bldg.

OWOSSO, MICH.—A fire in this city Sept. 3 destroyed Woodward's furniture factory, the plant of the Owosso Brewing Co. and other buildings. Reported loss, $175,000; insurance, about $90,000.

KENOSHA, WIS.—Reports state that the Laflin & Rand Powder Co. has bought a tract of land near Pleasant Prairie and will remove its plant at Plattville, Ia., to this place; estimated cost, $50,000.

TOLEDO, O.—The Bertram shipyards were destroyed by fire, Sept. 2, causing a loss to the shops and machinery of about $70,000.

GAS PLANTS.

BUFFALO, N. Y.—Alderman Geo. S. Potter has introduced a resolution to have the council ask bids for the construction of a municipal gas and electric lighting plant, to cost about $5,000,000.

PORTSMOUTH, VA.—The Portsmouth Gas Co. will extend its works for an additional capacity of 100,000 cu. ft.

ATLANTA, GA.—J. T. Burke, of the Georgia Lighting & Heating Co., writes us that the matter of lighting has been before the council committee. Mr. Burke has offered to light the city with a new gas lamp.

NEW COMPANIES.—Pittsburg Refining Co., Pittsburg, Pa.; $5,000,000, commencing with $100; to bore for oil and natural gas; Amos Steelsmith and Ferd Reiber, Butler, Pa.; E. H. Anderson, Wilkinsburg, Pa.; A. R. MacConnell and John J. McConnell, of Pittsburg.

Columbia Drilling Co., Pittsburg, Pa.; $100,000, commencing with $1,000; to drill for oil and gas; C. C. Beggs, W. J. Ruan, H. C. Beggs, J. H. Richardson and J. P. Beggs, all of Pittsburg.

Sheford Oil Co., Cleveland, O.; $5,000,000, with $10,000 paid in; to bore for oil and gas; J. S. Riddle, Chas. A. Post, E. T. Holmes, R. C. White, J. R. Post, all of Cleveland, O.

MISCELLANEOUS CONTRACTS.

TELEPHONE SYSTEM.—Le Mars, Ia.—The town has voted to grant a franchise to a telephone company. Address W. H. Hout.

BONDS.—Sheridanville, Pa.—Bids are asked until Sept. 13 for the purchase of $30,000 of 4% bonds. Chas. L. Criss, Borough Clk.

TUNNEL.—Boston, Mass.—Hearings are being given by the Boston Rapid Transit Commissioners on the question of building a tunnel to East Boston.

RETAINING WALLS.—Oakland, Cal.—The question of constructing retaining walls on 12th and 8th Sts. will be decided by the board of public works on Oct. 5.

TOWBOAT.—St. Louis, Mo.—Bids are asked until Oct. 1 for furnishing a steel hulled towboat. Maj. Thos. H. Handbury, U. S. Engr., Custom House, St. Louis.

DREDGING.—Oakland, Cal.—Bids are asked by the board of public works until Oct. 5 for dredging Lake Merritt, for which $80,000 has been appropriated.

COAL SHAFT.—Latrobe, Pa.—Bids are asked by the Latrobe Coal Co., Latrobe, until Sept. 30, for sinking and timbering a shaft at St. Vincent's monastery. D. N. Jones, Supt.

BANK PROTECTION.—New Orleans, La.—Bids are asked until Sept. 8 for pile bank protection work in the Third District, check, $2,500. Secy, Orleans Levee Bd., T. J. Duggan.

DRAINAGE CANAL.—Spokane, Wash.—Bids will probably soon be asked by Oskar Hubar, Civil Engr., Spokane, for constructing a canal seven miles long, to drain the Colville Valley.

LEVEE WORK.—New Orleans, La.—Bids are asked until Sept. 22 for about 461,000 cu. yds. of embankment for the Atchafalaya and Lafourche levees. Maj. J. H. Willard, U. S. Engr., New Orleans.

STONE JETTIES.—Green Harbor, Mass.—Bids are asked until Sept. 22 for constructing stone jetties, as stated in our advertising columns. Woodward & Emery, Chn. Comrs., 131 State House, Boston.

SHORE PROTECTION.—Fort Morgan, Ala.—Bids are asked until Oct. 5 for the construction of shore protection at Fort Morgan, as stated in our advertising columns. Address Major W. T. Rossell, U. S. Engrs., Mobile, Ala.

DRY DOCK.—Algiers, La.—Bids are asked until Oct. 21 for constructing a combined floating and graving steel dry dock, etc., at the naval reservation, Algiers. Estimated cost, $850,000. Mordecai T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

STONE, CEMENT, ETC.—New York, N. Y.—Bids are asked by the park board, the Arsenal, Central Park, Manhattan, until Sept. 15 for furnishing 400 bbls. of Portland cement, about 2,700 cu. yds. of ½ to 2½ in. crushed stone, 10,000 ft., B. M., of timber, etc.

TIMBER FENDER.—Pittsburg, Pa.—Jotte, Foley & Co., Pittsburg, and Jas. Omslaer & Co., Park Bldg., Pittsburg, submitted the only bids received by Maj. C. F. Powell, U. S. Engr., for building a pile and timber fender at Lock No. 2, Turtle Creek, at $2,740 and $2,330 respectively.

SHORE PROTECTION.—Cleveland, O.—The following bids were received by the park board, Aug. 17, for constructing a shore protection in Edgewater Park. C. A. Strong & Son, $38,836; L. P. & J. A. Smith, $39,050; Engel & Ettner, $39,530; William Robinson, $46,321.

TELEPHONE SYSTEM.—Sandusky, O.—Press reports state that the Union Suburban Telephone & Telegraph Co., recently incorporated with a capital stock of $1,000,000, will soon begin the construction of its proposed lines. Pres., H. A. Everett, Cleveland, O.; Engr., C. W. Mason.

LEVEE.—Hanford, Cal.—The Buena Vista Reclamation District has resolved to construct 13 miles of levee to reclaim 30,000 acres, south of Lake Tulare, estimated cost $7,000. The work will be let either by contract or day labor. N. W. Motheral, L. D. Combs, T. O. Robinson, J. D. Hefton, E. O. Miller, R. Rey, L. G. Vragizan and J. F. Pryor compose the committee.

PIER.—New York, N. Y.—The dock and ferry board awarded the contract to Henry D. Steers, Bowling Green, for building a new pier at Watts St. The bids were in three classes: first, for the building of the main pier; second, for extra piles for a Pennsylvania ferry rack to be hereafter built, and third, for riprap stone to hold the pier in place at the outer end. Mr. Steer's bid for the work was $38,820 for the first class, $2,050 for the second, and 38 cts. a ft. for the third. Other bidders were W. H. Jenks, Gildersleeve & Ralf, R. P. & J. H. Staats, B. S. Cronin and P. S. Ross.

COALING STATION.—Pago Pago, Samoa.—Press reports state as follows: Bids for the erection of a coaling station at Pago Pago have been asked by Commander Z. L. Tanner, who is in charge of the work. He will not state the amount to be expended, but says the work will be of a substantial character, and at least a year will be required for its completion. Lieut. F. T. Chambers, of the Engineering Department of the Navy, will supervise the construction of the wharf and coalsheds. He will also provide for a water supply and make a complete topographical survey of the land belonging to the United States surrounding the harbor. Commander Tanner says that no fortifications are to be erected.

COAL HANDLING PLANT.—New London, Conn.—We are informed that the Bureau of Yards and Docks, Navy Department, Washington, D. C., received the following bids Aug. 31 for constructing coal sheds, coal handling machinery, etc., at New London:

Bidder.		Time, days.
Riter-Conley Co., Pittsburg	$185,700 and $155,000	..
J. W. Hoffman & Co., Philadelphia	137,500	..
F. W. McNeal Co., New York	174,999	150
Manhattan Supply Co., 160 Duane St., N. Y.	323,400	..
C. W. Blakesley & Son*	$192,000 and 171,000	4 mos.
J. A. Mead & Co., New York	$81,043 and 105,602	..
Engineering Contract Co., New York	160,000†	165
R. P. & J. H. Staats, 29 B'way, New York	166,000	..
Berlin Iron Bridge Co., East Berlin, Conn.	159,900	6 mos.
R. H. Hood & Co., 220 B'way, New York	173,975	6 mos.
McGuire & Hall, 26 Cortlandt St., N. Y.	164,980	..
Wm. Seaver Engineering Co.	$206,677 and 361,777	8 mos.
Union Bridge Co., 1 B'way, New York	125,370‡	6 mos.

*New Haven. †Enlarged plant, $185,000. ‡Cleveland, O. ‡Alternate bids of $155,880, $155,360, $192,000 and $191,570.

CONTRACT PRICES.

VALVES.—Boston, Mass.—The Metropolitan Water Board received the following bids Aug. 25 for furnishing water valves:

Bidder.	Valves 20-in., 6 each.	16-in., 8 each.	12-in., 8 each.	Total.
Camden (N. J.) Iron Works*	$172	$110	$75	$2,512
Coffin Valve Co., Neponset, Mass	178	119	88	2,724
Atlantic Works, Boston, Mass.	208	214	148	4,684

*Awarded contract.

ELECTRIC LIGHTING.—West Superior, Wis.—Press reports state that the council voted Aug. 24 to accept the following proposition of William Burgess for street lighting for five years: 150 arc lights 1,200-c. p., $75 a year; 200 arc lights, 1,200-c. p., $75; 300 arc lights, 1,200-c. p., $72.50; all lights over 300, $70; 150 arc, 2,000 c. p., $80; 200 arc, 2,000 c. p., $80; all lights over 200-300, $77.50; over 300, $75. The above proposition on being accepted, Mr. Burgess will furnish commercial lighting as follows: Arc lights, 7 o'clock, a month, first, $5; additional, $5; 10 o'clock, a month, six nights a week, first, $6; additional, $5.50; 12 o'clock, a month, seven nights a week, first, $7; additional, $6.50; all night, seven nights a week, $8; additional, $7.50. Incandescent lights: Meter rates, 5-10 cts. a light hour or 10 cts. a 1,000 watts. Contract rates: Running later than 10 o'clock, $50; not later than 12 o'clock, $55; all night, $65, 16 c. p.

BRIDGE MASONRY.—Fort Wayne, Ind.—Chas. E. Moellering & Co. were awarded the contract, Aug. 19, for the abutments of the Walton Ave. bridge over the Maumee River, at $5.98 a cu. yd. for stone, $4.25 a cu. yd. for concrete, 16 cts. a cu. yd. for excavation, and 40 cts. a cu. yd. for wet excavation. Stringer & Wright were awarded the contract for the abutments of the Clinton St. bridge over Spy Run and the bridge over Black Creek, in Maumee Township, at $7.78 a cu. yd. for stone. Their bids are $592 and $354, respectively. Wm. H. Boehorn, County Engr.

SAND.—Washington, D. C.—The district commissioners have accepted the following proposals: Columbia National Land Dredging Co., to furnish the city with 2,250 cu. yds. of paving sand at 45 cts.; John B. Lord, to furnish the city with 4,000 cu. yds. of concrete sand at 59 cts., 1,000 cu. yds. of building sand at 65 cts., and 4,000 cu. yds. of screened gravel at 69 cts.

SEWER WORK.—St. Louis, Mo.—L. H. Meyer, 1084 North 8th St., St. Louis, was awarded the contract at $11.00 a lin. ft. Sept. 1, 1898, for taking out 928 ft. of wooden bottom in the Mill Creek sewer and replacing the same with concrete. The highest bid was $21.50 a ft. B. H. Colby, Sewer Comr.

ASPHALT PAVING.—Scranton, Pa.—The following bid was received Sept. 1, 1898, for paving Quincy Ave., between Pine and Gibson Sts.: Barber Asphalt Paving Co., asphalt pavement, $2.37 a sq. yd.; 4 x 12-in. curb, 46 cts. a lin. ft.; 6 x 12-in. curb, 53 cts. a lin. ft.; 6 x 12-in. curb with tile drain, 60 cts. a lin. ft.; circular curb with tile drain, 98 cts. lin. ft.; dressing and resetting old curb, 27 cts. a lin. ft. The curb is to be set in concrete. Joseph P. Phillips, City Engr.

ASPHALT PAVING.—Paterson, N. J.—The Paterson Construction Co., Pres., Chas. M. King, has been awarded the contract at $1.98 a sq. yd. for 29,500 sq. yds. of asphalt paving and at 40 cts. a lin. ft. for 300 ft. of crosswalk.

BRICK PAVING. — Hagerstown, Md.—E. G. Buck has been awarded the contract at $1.22 a sq. yd. for paving two blocks of Franklin St. with Clearfield brick; cement filler to be used.

ASPHALT WALK.—Toledo, O.—The county commissioners received the following bids last month for constructing 19,000 ft. of 18-ft. asphalt walk around the court house park: Schillinger Bros., $1.15 a lin. ft.; Frank Hill, $1.33; Warren-Scharf Asphalt Paving Co., $1.69; M. F. Sullivan, $1.97.

PUMPING STATION.—Boston, Mass.—The Metropolitan Water Board received the following bids Aug. 25 for building the low-service pumping station at the Chestnut Hill reservoir, as advertised in Engineering News; Norcross Bros.'s bid was accepted; all local bidders:

Bids Received at Boston, Mass., Aug. 25, 1898, for the Construction of a Low-Service Pumping Station.

Quantities.		Norcross Bros.	Woodbury & Leighton.	McNeil Bros.	C. A. Dodge & Co.	Connery & Wentworth.	L. P. Soule & Son.	C. E. Clark & Co.	L. D. Willcutt & Son.	Whidden & Co.
Excavation	15,000 cu. yds.	$0.33	$0.35	$0.65	$0.70	$0.75	$0.87	$0.80	$0.64	$1.25
Cement conc. mas'ry*	1,300 " "	4.14	5.50	6.50	4.55	4.65	4.44	6.21	5.09	7.50
Cement conc. mas'ry†	2,800 " "	5.43	6.20	7.50	6.70	7.50	5.74	7.83	8.32	8.75
Concrete floor	1,600 sq. yds.	1.39	2.00	1.00	1.60	3.00	2.35	1.72	1.64	1.75
Rubble stone masonry	28 cu. yds.	5.75	5.00	6.00	5.04	7.00	4.70	7.50	8.00	7.50
Brick masonry (fndtns)	30 " "	12.00	15.00	9.00	11.17	15.00	20.00	9.75	13.50	13.50
Cut granite stone	150 " "	53.19	50.00	40.00	40.50	37.00	41.75	41.20	38.30	50.00
Superstructure, complete		146,400	152,000	146,000	150,791	149,900	155,996	151,480	158,689	168,534
Total		$182,660	$193,050	$193,238	$195,077	$199,191	$201,644	$202,912	$207,200	$232,449

*Foundations, made with natural cement. †Foundations, made with Portland cement.

PIPE SEWERS.—Palmer, Mass.—C. W. Johnson has been awarded the following contracts for constructing certain sewers: 15-in. main sewer, 38 cts. a ft.; 10-in. laterals, 38 cts. a ft.; manholes, $32 each; catchbasins, $16 each.

BRICK PAVING.—Schenectady, N. Y.—We are informed that the following contract has been let to John Twomey, Schenectady, for brick paving, curbing, etc., in Dock St.: All paving, vitrified brick, a sq. yd., $1.80; granite block, $2.65; cobblestone, 18 cts.; 4-in. curbing, a lin. ft., 60 cts.; 8-in. curbing, $1.15; catchbasins, complete, each, $90; retaining wall, a cu. yd., $4.10; iron rail for retaining wall, a ft., $1; water taps, each, $8; sewer connections, a lin. ft., 70 cts.; lead pipe, AAA ¾-in., a lin. ft., 80 cts.; 15-in. sewer, laid, a ft., 80 cts.; 10-in. sewer, laid, a ft., 60 cts., and filling, a cu.yd., 20 cts.

MACADAMIZING.—Paterson, N. J.—The county board of freeholders received the following bids Aug. 19, 1898, for building portions of 17 macadam roads: F. J. Marley, three roads, bid ranged from 26 cts. to 31½ cts. a sq. yd.; Edward Dowling, three roads, 18 cts., 21 cts. and 28 cts.; Bunn & Daniels, three roads, 22 to 25 cts.; McKiesnan & Bergen, five roads, 23 to 33½ cts.; Wright & Lindsey, five roads, 28 to 35 cts.; Daniels & Stanley, four roads, 22 to 30 cts.; R. M. Torbet, four roads, 24 to 33 cts.; Wolf & Bergen, two roads, 26 and 29 cts.; Francisco Bros., three roads, 20, 24 and 27 cts.; Colfax & Steele, one road, 30 cts.; Nelson Cassidy, three roads, 23 and 28 cts.; John Grish, one road, 24 cts.

IMPROVING RIVER.—Rock Island, Ill.—Capt. C. McD. Townsend, U. S. Engr., Rock Island, received the following bids Aug. 30 for constructing dams and shore protection between Dubuque and Le Craire, Ia., for continuing the improvement from the mouth of the Missouri River to St. Paul, Minn., as advertised in Engineering News; John Pickley's bid was recommended for acceptance:

Bidder.	In place—Rock, 30,000 cu. yds.	In place—Brush, 37,000 cu. yds.	Total.
John Tibby, Dubuque, Ia.	$0.96	$0.40	$43,600
A. B. Teasdale, Cassville, Wis.	.95	.35	41,450
John Pickley, Dubuque, Ia.	.76	.25¼	32,143
Jacob Richtman, Elsberry, Mo.	.90	.30	38,100
A. Kirchner, Fountain City.	.96	.30	39,900
Fetter & Crosby, La Crosse.	1.00	.26	39,620
A.J. Whitney, Rock Island, Ill.	1.00	.30	41,100

The following additional bids were recommended for acceptance for improving the Mississippi River from the mouth of the Ohio River to St. Paul, Minn., and for continuing the improvement of the river from the mouth of Missouri River to St. Paul: Dams and shore protections between Rock Island and New Boston, Ill.—Fetter & Crosby, La Crosse, Wis., 32,000 cu. yds. of rock in place, $1.00 a cu. yd.; 32,000 cu. yds. of brush in place, 28 cts. a cu. yd.; dams and shore protections between Reed's Landing and Winona, Minn., and Winona and La Crosse—Jacob Richtman, Elsberry, Mo., 25,000 cu. yds. rock, 90 cts.; 50,000 cu. yds. brush, 30 cts.; between New Boston, Ill., and Burlington, Ia.—Albert Kirchner, Fountain City, Wis., 28,000 cu. yds. rock, $1.00; 25,000 cu. yds. brush, 29 cts.; between Burlington and Montrose, Ia.—Albert Kirchner, 37,000 cu. yds. rock, 91 cts.; 46,000 cu. yds. brush, 26 cts; between Keokuk, Ia., and Quincy, Ill.—Albert Kirchner, 21,000 cu. yds. rock, 95 cts.; 28,000 cu. yds. brush, 27 cts.; between Hamburg, Ill., and Cap au Gris, Mo., and between Cap au Gris and mouth of the Illinois River—James Short, St. Charles, Mo., 30,000 cu. yds. rock, 73 cts.; 60,000 cu. yds. brush, 37 cts.

INDUSTRIAL NOTES.

THE MAYBERRY & WATSON CO., Birmingham, Ala., is reported to have sold 20,000 bbls. of cement to the Alabama Steel & Shipbuilding Co., of the same city, for the construction of its new plant at Ensley, Ala.

THE SHIFFLER BRIDGE CO., Pittsburg, through its eastern office, 45 Broadway, New York, is erecting the steel frame work for the tank house of the Raritan Copper Works, Perth Amboy, N. J. The building is 212 x 307 ft., and will be used for the electrolytic refining of copper. The plant will be the largest in the East, it is claimed.

MR. GEORGE W. KNOPF, Carnegie Bldg., Pittsburg, consulting and contracting engineer, is erecting a steel boiler house, 133 ft. long, and a steel power house, 82 ft. long, for the Pittsburg Plate Glass Co., to be used in connection with its recent extensive additions at Ford City, Pa. Both buildings have side walls of brick and are roofed with slate. He is also erecting the structural steel in a five-story store building for Rosenbaum Bros., Cumberland, Md., the material for which was manufactured by Jones & Laughlins, Ltd.

ABENDROTH & ROOT MFG. CO., 28 Cliff St., New York, has sold 35 carloads of its Root's spiral riveted pipe to the city of Paris, Tex., at a cost of about $40,000. The company reports that recent contracts have also been received from Kewanna, Ind.; Mokena, Ill.; Augusta and Blair, Wis.; Alden, Buffalo Centre, Colfax, Minden, New Sharon and Oxford Junction, Iowa; Herman, Neb.; Siloam Springs, Ark.; Milan and Slater, Mo. The pipe is made from 4-in. to 24-in. diameter and will stand pressures from 500 to 1,200 lbs. a sq. in. It has been in use for ten years at Eagle River, Wis.; for 18 years at Lexington, Mo.; and for 26 years at Rochester, N. Y.

THE VULCAN IRON WORKS CO., Toledo, O., reports that it has recently sold two more large "Giant" B, Special 75-ton steam shovels to be used on the Massena Canal, at Massena, N. Y. Also a 55-ton "Giant" B steam shovel to go to Sweden. This shovel is bolted instead of being riveted, in order that it may be transported and is to be used in iron mines, the purchaser having seen the shovels at work in the Messabe country, Michigan. The company further states that it has had an immense business this year, and that had it not been that previous indications caused a stocking up it would have been unable to fill the orders received. Good business during the entire year is indicated by present conditions.

THE ASSOCIATED EXPANDED METAL COMPANIES of the United States held their semi-annual meeting in Boston Aug. 30 and 31. There were representatives present from 11 companies, in addition to those from the Canadian company. Mr. John F. Golding, the inventor, who was also present, is interested in the English company, which controls the business throughout Europe by means of six distinct companies in France, Belgium, Germany, Austria, Russia and Italy. The proceedings of the Boston meeting were largely routine, and a special committee, which is to compile and issue a revised and enlarged catalogue, was appointed. All the companies reported satisfactory conditions in all branches, notwithstanding the dull period of the last six months. The delegates were entertained by the Eastern Expanded Metal Co., of Boston, including a lecture and entertainment at the Exchange Club on Aug. 30, followed by a collation, at which there were present nearly 100 architects and engineers of Boston and New England. Mr. Merrill Watson is Secretary of the associated companies.

THE AMERICAN WOOD PRESERVING CO., Philadelphia, Pa., has recently received an order for about 1,100 gallons of its preservative Woodiline from the New York Central & Hudson River R. R. Co In November, 1897, a small quantity of the compound was used by the latter company for the treatment of wooden signal boxes as an experiment. The Queen & Crescent Co. placed an order in July, 1896, for 800 gallons of Woodiline for use on white oak ties and bridge timbers over the Cumberland River, at Burnside, Ky. This company has also just placed another larger order for the preservative. An important eastern railway company, we are informed, has had since Jan. 1, 1898, over 7,500 gallons of Woodiline. The Boston Elevated R.R.Co.has placed an order for over 2,000 galls. in the same time. The Bangor & Aroostook R. R. has recently duplicated its order of two years ago and the Richmond, Fredericksburg & Potomac R. R., the Cumberland Valley R. R., the Northern Central Ry. and others, having been early experimenters with Woodiline, are now regular users of the compound, which seems able to demonstrate its value as an inexpensive wood preservative wherever it is used. The officers of the company are, Mr. Frederick S. Hovey, Pres., and Mr. J. J. Hovey, Secy. and Treas.

THE WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, has the contract to build the plant of the Snoqualmie Falls, Wash., involving the tranmission of 10,000 HP. a distance of 45 miles, without other than normal losses in the dynamos, transformers and over the line. The power station is to be located at Snoqualmie Falls, 45 miles from Tacoma, and 31 miles from Seattle, to which places the current is to be transmitted and there utilized by Westinghouse motors. The contract involves the installation at the above points, of four three-phase rotary-armature dynamos, having a normal aggregate capacity of 6,000 K-W., and which are to be direct-connected to water-wheels; two 75-K-W. exciter dynamos also to be direct connected to water-wheels; high and low potential switchboards for the main power station and sub-stations at Seattle and Tacoma, involving 76 marble panels with all necessary instruments, switches, etc.; high tension oil insulated static transformers having an aggregate capacity of 10,875 K-W.; rotary transformers with a total output of 2,700 K-W. and 6 type "C" motors developing 1,600 HP., with adequate lightning protection at both ends of the line. These machines when installed will make available for industrial, railway and lighting purposes the power of Snoqualmie Falls. The line potential will be 25,000 volts, and its current will be carried over bare aluminum wires to sub-stations where lowering transformers will sufficiently reduce the voltage for safe transmission within the limits of the cities.

NEW COMPANIES. — City Refuse Utilization Co., 60 Grand St., Jersey City, N. J.; to remove and utilize refuse; $50,000, with $1,000 paid in; Herbert Tate, 60 Grand St., William W. Gooch, Henry W. Meen.

National Motor Co., St. Louis, Mo.; $100,000; H. H. Hensgen, O. D. Harris, L. A. Allard and William P. Lorew.

Turbine Motor Co., 24 Morris St., Jersey City, N. J.; $100,000, commencing with $1,000; to manufacture all kinds of engines, boilers, machines, etc.; Louis J. Auerbacher, 157 Grand St.; J. C. Stines, 24 Morris St.; Orville R. Van Vechten, 24 Morris St., all of Jersey City.

Standard Drop-Forging Co., Boonton, N. J.; $10,000, commencing with $1,000; to conduct a general business of drop-forging, etc.; Dickinson W. Richards, Orange, N. J.; Frank O. Affeld, Jr., Brooklyn, N. Y.; Thos. G. Boone, Boonton.

Chicago Vapor Light Co., Chicago, Ill.; $1,000,000, commencing with $100; to manufacture incandescent gas machines and apparatuses; T. M. Moe, R. P. Benedict, W .R. Hanze, W. H. Woodron and G. H. Powell, all of Chicago.

Atlas Elevator Co., Minneapolis, Minn.; $500,000, commencing with $5,000; to operate grain elevators, warehouses, etc.; A. G. Moritz, C. M. Harrington, F. C. Van Dusen, Gustav F. Ewe and Frank M. Mann, all of Winona, Minn.

War Munition Co., Cleveland O.; $1,000,000, commencing with $50; to manufacture powder, projectiles, etc.; E. G. Sherlin, C. A. Sherlin, W. E. Irish, H. H. Anderson and B. Davenport, all of Cleveland.

Operating & Investment Co., Philadelphia, Pa.; $2,000,000, commencing with $500; to equip and own railways, boilers, machinery, etc.; T. L. Mattson, Henry Morris, G. H. Millet, Howland Coit and E. A. Moore, all of Philadelphia.

Union Terminal Coal Storage Co., Claremont, Baltimore, Md.; $500,000, commencing with $500; to conduct a cold storage business; D. B. Martin, E. F. Cook, Henry Lammertz, J. J. Martin and F. R. Shattuck, all of Philadelphia, Pa.

Porto Rico Commercial Co., 60 Grand St., Jersey City, N. J.; $500,000, commencing with $1,000; to do a general shipping and commission business, and to build docks, piers, etc.; Wm. D. Martin, Felix B. Ruthenburg and Isaac W. Taussig, all of New York; Allan L. McDermott, Jersey City.

West India Land & Trading Co., 60 Grand St., Jersey City, N. J.; $25,000, commencing with $2,500; Benjamin W. Morrill, East Orange, N.J.; John Farr and Geo. C. Kobbé, Short Hills, N. J.

Adam Weber Co., Crow's Mills Lane, Weber, N. J.; $150,000, with all paid in; to manufacture clay retorts, fire brick, etc.; Adam Weber, Oscar B. Weber, Albert J. Weber, Chas. C. Weber, and Adolph Ehrenzeller, all of Weber, N. J.

Heckert & Ballztey Hollow Axle Co., 76 Montgomery St., Jersey City, N. J.; $1,000,000, commencing with $1,000; to manufacture and sell steel and iron; John McIntyre, Jersey City, N. J.; Edwin Ballztey, Glen Echo, Md.; William Heckert, Wm. H. Wallace and Geo. B. Hibbard, all of New York.

National Motor Carriage Co., $500,000; Arthur S. Winslow and Thomas D. Merrigan, of New York; Charles W. Parker, of Jersey City, N. J.

Broadhead Contracting Co., Newark, N. J.; $125,000, commencing with $1,000; to do a general contracting business; A. D. Brodhead, Elizabeth, N. J.; Jas. E. Brodhead, Flemington, N. J.; Calvin E. Brodhead, Jr., Perth Amboy, N. J.; Charles Holzhauer, Newark, N. J.; Fred J. Faulks, Newark, N. J.

Citizens' Telephone Co., Spartanburg, S. C.; $8,900; Pres., W. H. Clarke; Mgr. and Treas., C. E. Fleming; Directors, J. H. Montgomery, D. E. Converse, W. H. Clarke, R. H. F. Chapman, John W. Simpson, H. B. Carlisle, B. F. Shockley, John W. Floyd and C. E. Fleming.

Esmond Electric Traction & Signal Co., New York; to build, equip and maintain railways and signals and signal stations and furnish electric heat, light and power; D. M. Maxon, G. E. Cruse, C. S. Jones, D. A. Davies and R. H. E. Starr, all of New York.

WATER SUPPLY AND STREET LIGHTING.

The Town of Cobourg, Ontario, Canada, will receive separate tenders addressed to John Purser, Chairman of the Fire, Water and Light Committee, until 12 noon of the 31st day of October next:

1st.—For the supply of water for fire protection and public use, and,

2d.—For lighting the streets of the Town.

For particulars address the undersigned,

D. H. MINAKER,
Town Clerk.

Cobourg, Ont., Aug. 30, 1898. 36-8t

U. S. ENGINEER OFFICE, Mobile, Ala., September 5, 1898.—Proposals for construction of SHORE PROTECTION at Fort Morgan, Ala., will be received until 12 m., Oct. 5, 1898, and then opened. Information furnished on application. WM. T. ROSSEL, Maj., Engrs. 36-4t

RAILWAY GRADING.

PETERSBURG RAIL ROAD COMPANY,
ENGINEER'S OFFICE.
RICHMOND, Va., Sept. 3, 1898.

Sealed proposals will be received at the Engineer's Office, Byrd Street Station, Richmond, Va., to be opened the 16TH INST., at noon, for the Graduation of a line about ten miles in length, beginning about two miles south of Petersburg, Va., and running southerly in proximity to the existing railroad.

Profile and specifications may be seen and other information had at the office of the Petersburg Railroad in Petersburg, Va., or at the Engineer's Office, at Byrd Street Station, Richmond, after THURSDAY, THE 8TH INST.

The company reserves the right to reject any and all bids.

E. T. D. MYERS,
Chief Engineer.

36-1t

IMPROVING BLEECKER RESERVOIR.

ALBANY CITY WATER-WORKS.
OFFICE OF THE SUPERINTENDENT.

Sealed proposals will be received by the Board of Water Commissioners, at their office in the City of Albany, N. Y., until Tuesday, September 20th, at 11 o'clock a. m. of that day, for Improving Bleecker Reservoir, consisting of a concrete division wall, cleaning out reservoir and laying distributing pipes.

All bids must be enclosed in a sealed envelope and delivered to said Board at its meeting held at the time and place aforesaid, at which time and place bids will be publicly opened and read, and the award of the contract made as soon thereafter as practicable.

Every proposal for the work must be accompanied by a draft or certified check in the sum of $2,000, issued by a bank in good credit within this state, payable at sight to the Chamberlain of the City of Albany. The amount of bond required on execution of contract for its faithful performance and execution will be $15,000.

The work shall be commenced within one week after signing the contract, and be completed on or before February 1, 1899.

The person or persons to whom the work may be awarded will be required to execute the contract with the required surety within ten days of the date of the award.

Plans may be seen and specifications, form of proposal, bond and contract obtained at this office.

The right is reserved to reject any or all bids.

GEORGE I. BAILEY,
Superintendent.

Dated Albany, N. Y., Sept. 6, 1898. 36-1t

Nearly Every Prominent Contractor and Manufacturer of Contractors' Supplies READS ENGINEERING NEWS

AVAIL YOURSELF OF THIS PAPER WHEN BIDS ARE WANTED FOR CONSTRUCTION OR FOR FURNISHING SUPPLIES.